

LOCUS OF CONTROL: ITS RELATIONSHIP TO RELIGIOUS DENOMINATIONS
AND LEADER-FOLLOWER PERCEPTIONS OF BEHAVIOR

By

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A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF
THE UNIVERSITY OF FLORIDA
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1978

ACKNOWLEDGEMENTS

The author wishes to express his appreciation to the members of his supervisory committee Professors H. Joseph Reitz, Jerald W. Young, and Richard M. Swanson, not only for their patience and expert assistance in completing this dissertation, but for their encouragement, guidance, and friendship over the past four years.

Similarly, the author wishes to thank the members and ministers of the churches who gave so generously of their time to provide the data for this study.

An additional debt of gratitude is owed to the many members of the staff and faculty of the University of Florida for their special consideration and support, especially to Doctor Jack Feldman who served as my advisor during my first years at the University.

Finally, this dissertation is dedicated to my wife, Anne, in gratitude for her love, devotion, encouragement, and sacrifice over the past 35 years.

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Abstract of Dissertation Presented to the Graduate Council
of the University of Florida in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

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December, 1978

Chairman: H. Joseph Reitz
Major Department: Management

While a great deal of research has been conducted on the personality trait Locus of Control (the extent to which individuals perceive that their rewards are contingent on their own behavior versus the extent to which they feel that their rewards are controlled by fate, chance, or powerful others), very little has been done to investigate the antecedents of this trait. It appears possible that there might be a relationship between Locus of Control and religion in that many religions differ in their teachings as to the degree of control man has over his outcomes. If such a relationship between Locus of Control and religion were found, there would be justification for conducting further research to determine the direction of causality.

Because of the conflicting results reported in past research on Locus of Control in leadership situations, other areas of interest were: 1) the relationship between the leader's and the follower's Locus of Control and the follower's perceptions of the leader's behavior, and 2) the relationship between the leader's and the follower's Locus of Control and the leader's perceptions of his own behavior.

Two pilot studies were conducted to determine what modifications to the existing Locus of Control scales might be necessary in order to

reflect the possible relationship between religion and Locus of Control. The results indicated that additional responses reflecting belief in God as a controlling force in human events was required.

This modified Locus of Control scale, the consideration and structure subscales from the Leader Behavior Description Questionnaire - Form XII, and Rokeach's values scales were combined into a survey questionnaire which was administered to a volunteer sample population of adult church members and ministers from two churches in each of the six major Protestant denominations (Baptist, Congregational, Episcopalian, Lutheran, Methodist, and Presbyterian).

A factor analysis of the Locus of Control, consideration, and structure scales produced four Locus of Control factors and three LBDQ factors. Zero-order correlations, multiple-range tests, and multiple regression analysis were used to examine the relationships described above. The results indicated that: 1) the God external Locus of Control factor best discriminated between the Protestant denominations ($p < .00001$) while the other three Locus of Control factors did not. 2) The emergence of the God external factor in the Locus of Control scale, and its effectiveness in discriminating between the denominations, appears to support the contentions of other researchers that the existing Locus of Control scales do not tap the full dimensions of the Locus of Control construct. 3) There were significant relationships between Locus of Control and several of Rokeach's values. 4) Significant, complex relationships existed between the leader's and follower's Locus of Control factors and the leader's and the follower's perceptions of the leader's behavior. For example, both the leader's and the follower's Locus of Control were related to the follower's perceptions of leader behavior on

two of the three Leader Behavior Questionnaire factors, but not to the third factor. In the case of the leader's perceptions of his own behavior as measured by the same factors, neither the leader's nor the follower's Locus of Control was related to one of the three factors, only the leader's Locus of Control was related to another factor, and both the leader's and follower's Locus of Control were related to the third factor.

The results of this study indicate that further research may be justified to determine whether or not religion may be an antecedent of Locus of Control, and that further research also appears justified in order to determine the full implications of Locus of Control for leader-member interactions.

SECTION I

INTRODUCTION

Rotter (1966, 1975) has found evidence that individuals differ in their expectations about internal as opposed to external control of reinforcement. Specifically, individuals differ in the extent to which they perceive that their rewards are contingent on their own behavior versus the extent to which they feel that their rewards are controlled by fate, chance, or powerful others. Rotter has further maintained that these expectations, which he labelled Locus of Control (LOC), form a relatively enduring personality trait closely associated with the concept of powerlessness. This trait, in combination with other variables, is said to affect the individual's attitudes and subsequent behaviors.

Despite the extensive research that has occurred since Rotter's 1966 findings, at least two problem areas regarding this trait still exist. First, while there has been some speculation as to the antecedents of LOC, little research has been directed toward explaining the causes of individual differences in LOC (Joe, 1971; Lefcourt, 1966). Second, some research has been conducted on the relationship between LOC and the class of behaviors generally labelled "Leadership." However, the results have been inconsistent. The research effort described in this paper is directed toward these two problem areas.

A review of the literature reveals four possible reasons for the persistence of these two problem areas: shortcomings in the LOC scale, the use of varying and conflicting criteria, the use of restricted sample populations, and lack of research effort in these two areas.

Rotter (1966) originally proposed that the LOC scale was unidimensional. However, subsequent researchers have found evidence that the LOC scale is multidimensional (Duffy et al., 1977; Gurin, Gurin, Lao, & Beattie, 1969; Joe, 1971; Mirels, 1970; Shraugher & Silverman, 1971). In his 1975 review, Rotter finally agreed that the LOC scale was multidimensional. Sanger and Adler (1972) cited the possibility that a multidimensional approach to LOC was required because the population was becoming increasingly aware of the concept of control and concomitantly more critical of attempts by others to limit that control. While Duffy and Shiflett (1977) claimed that the predictive value of the subscales was no greater than that of the entire scale, others (Gurin et al., 1969; Mirels, 1970; Sanger & Adler, 1972) claimed that using the total scale score might mask important differences in the subject population.

Those proposing the use of the subscales present a very logical argument. They proposed that those who feel that their outcomes are controlled by chance, or a world whose rules are too impossibly complex to cope with, are likely to exhibit passive behavior because there is no way they can hope to gain control over their outcomes. Those who feel that their outcomes are controlled by the socio-political system, or powerful others, may be quite active and aggressive because they perceive the possibility that such behavior may enable them to gain control of their outcomes.

Along with growing evidence supporting the multidimensionality of the LOC scales came the realization that the scale might not be tapping the full construct of LOC. This shortcoming appears to be at least a partial cause for Rotter's failure to find a relationship between LOC

and religious affiliation. While he found no significant relationship between subjects' LOC scores and religious affiliation, interviews with the subjects at least suggested to Rotter that religion might have a role in the development of LOC and that further research in this area was needed (Rotter, 1966). Benson and Spilka (1973) commented:

Rotter's (1966) scale defines external control in terms of luck fate, and chance. While it seems reasonable to argue that one who places his fate in God's hands is externally controlled, he may find options phrased in luck and chance terminology irrelevant. (p. 308)

That the use of varying criteria may be responsible for the conflicting research findings becomes more evident as one studies the research methodologies utilized in the various studies pertaining to the two areas of interest. Rotter (1966), using his LOC scale and scores on the McLean scale which measures belief in the literalness of the Bible found no significant relationship between religion and LOC. However, Shraugher and Silverman (1971) used the LOC scale and religious affiliation to explore the relationship between LOC and religion. They found significant differences among members of the Jewish, Catholic, and Protestant faiths moderated by frequency of church attendance.

Similarly, in the leadership area, Durand and Nord (1976) used a version of Gurin et al.'s (1969) LOC subscales to predict follower perceptions of their leader's behavior as measured by the structure and consideration subscales of the LBDQ - Form XII (Stogdill, 1963). Pryer and Distefano (1972) used the same LBDQ - Form XII subscales, but used the total score on the LOC scale. Evans (1974) used the total score on the LOC scale, but used three subscales of the LBDQ - Form XII to measure structure and three subscales to measure consideration. Goodstadt and

Hjelle (1973) used the total LOC score, but measured leadership behavior in terms of coercive power and persuasive power. The conflicting results of these studies becomes evident when one examines Table 3. For the Relationship Between LOC and Structure, two researchers found a positive relationship, two found a negative relationship, and one found no significant relationship. For LOC and Consideration, three researchers found a negative relationship, one found a positive relationship, and one found no significant relationship.

The use of restricted sample populations and the paucity of research in these two areas appear to contribute to the conflicting findings plus casting doubt on the generalizability of the findings. Only four studies have been accomplished on the relationship between LOC and the leader's behavior, and LOC and the follower's perceptions of the leader's behavior. Of these four studies, two have been conducted using college students. Of the applicable studies reviewed in the area of religion, only two of twelve studies used an adult, non-college sample population. Cherlin and Bourque (1974) commented that the LOC research appeared to lack generalizability because the sample population has largely consisted of subjects under thirty years old, with a greater than high school education, and from the middle socio-economic class.

Section II of this study will review the relevant literature in an effort to:

1. Develop a rationale supporting the contention that there is a relationship between an individual's LOC and his religious affiliation. (This will be the first step in determining whether or not religious socialization is a possible antecedent in the formation of an individual's LOC.)

2. Clarify the relationship between LOC and the leader's behavior as perceived by the leader.

3. Clarify the relationship between LOC and the follower's perceptions of his leader's behavior.

4. Form testable hypotheses concerning the relationships discussed in 1, 2, and 3 above.

Section III will develop the methodology for testing the hypotheses using adult members of religious organizations as the sample population.

Section IV will report on the results of the study, and Section V will contain the discussion and recommendations resulting from the analysis of the results.

SECTION II
BACKGROUND AND RELEVANT LITERATURE
LOC and Religion

In the following paragraphs it will be shown that religious denominations vary significantly on factors which have a close similarity to the constructs of LOC. Specifically, a rationale will be developed for predicting significant differences among Protestant denominations on the LOC dimension. If such differences are found, the study may contribute to a better understanding of LOC as little research appears to have been done to determine the antecedents of LOC (Phares, 1976). The research that has been done has concentrated on parental influence (Chance, 1965); ethnic background (Jessor et al., 1968), and social class (Gruen & Ottinger, 1969). The results, although not conclusively consistent, have provided a degree of support to speculate that religion may be major causal variable for differences in individual LOC, and that parental behavior, ethnic background, and social class are either intervening or moderating variables.

If the hypotheses predicting the relationship between LOC and religious denominations are supported by this study, it would appear that longitudinal studies to determine the direction of causality would be justified. If, as many researchers claim, LOC has important implications for individual coping behavior, then a knowledge of its antecedents could provide important information for altering the individual's

coping behavior. Such a capability may contribute both to developing individual potential, and indirectly, the effectiveness of organizations (Phares, 1976).

The development of the hypotheses will proceed from a discussion of some general findings and comments of other researchers to a discussion of the constructs of LOC and how these constructs relate to the specific findings of Rokeach (1969) in such a manner as to lead to the prediction of significant differences in LOC between the members of different Protestant denominations.

A General Discussion of the Relationship Between LOC and Religion

The Bible itself appears to present evidence that the Judaeo-Christian religions vary in their beliefs as to the degree of control man has over his fate. Proverbs emphasizes man's ability to control his destiny through his own abilities and performance rather than depending upon the grace of God. Ecclesiastes, however, takes the opposite view, emphasizing the powerlessness of man, who must place himself in God's hands because he is unable to do anything for himself. Life's outcomes are unpredictable, controlled by a God whom man can never know (Rylaarsdam, 1974).

Shraugher and Silverman (1971) commented:

Many religious doctrines appear to have implications for the development of attitudes about one's potential for control over what happens to him. These doctrines often appear inconsistent, however; some imply that the individual is responsible for his rewards and punishments, and others imply that one's fate rests with sources outside himself. (p.11)

To explore the relationship between LOC and Religion, Shraugher and Silverman administered the LOC scale to 465 undergraduate students and gathered such other data as demographic, frequency of church attendance,

and religious affiliation (Jewish, Catholic, or Protestant). Analysis of variance for the LOC scores indicated a significant main effect for religious affiliation with the Jewish subjects being significantly more external than Protestants (Sheffé test; $p < .05$), while Catholics did not differ significantly from either group. There was an interaction between frequency of attendance and religious affiliation with regularly attending Catholics being significantly more external than Protestants (Sheffé test; $p < .05$).

After conducting a study of the religious beliefs of college students, Poppleton and Pilkington (1963) concluded that religious attitudes differ sharply within the Protestant denominations and that studies which "lumped together" various Protestant denominations obscured important differences between them.

Benson and Spilka (1973) conducted a study using Catholic high school students to determine whether or not self-esteem and LOC were related to the individual's image of God. They found the following correlations between an individual's LOC and his image of God: A Loving God ($-.30$, $p < .01$), A Vindictive God ($+.23$, $p < .01$), and an Impersonal God ($+.18$, $p < .05$). The findings appear to support their contention that a demanding, powerful, and controlling God is consistent with the perception that one is not in control of his outcomes while a perception of a God who is freeing rather than restricting, and who is uncontrolling rather than controlling, is consistent with a perception of internality.

Nunn (1964) conducted a study investigating parents use of the concept of God as a means of controlling their children. He found that parents who felt powerless tended to form a coalition with God in which God was invoked as a third party to exercise control over the children.

In the course of the investigation, he came to the conclusion that,

. . . powerless people who form a coalition with God to control their children tend to participate in a religious system that especially denies the competence of the actor and exalts the direct control of man's affairs by God. These people tend to prefer sect and transitional churches, while those who do not feel powerless tend to prefer denominational type churches.
(p. 420)

He classified transitional churches as Church of Christ, and Southern Baptists, sects as Jehovah's Witnesses and Baptist sects, denominational churches as Methodists, Presbyterians, "and other Protestants."

Despite the above findings, the question still remains unanswered as to whether religion acts indirectly on the personality of the child through the way it affects the attitudes and behavior of the parents in their interactions with the child; or whether the influence of religion is more direct through the effects of religious education experienced by the child. It is quite possible that the effects are a combination of both.

Allport et al. (1948) in investigating the religion of post-war college students, concluded that early religious training was likely to be a principle psychological influence upon the individual's later religious life. They further found that 50% of the college students surveyed reported that they had turned against the religious teachings of their parents. However, they reported considerable reason to suppose that college students are in the least religious period of their lives, and that religion becomes more important as they mature and face increased responsibilities. This finding appears to indicate, as maintained previously, that college populations are not representative of the general population in their religious beliefs. This may explain previous failures to find a relationship between religion and LOC when college students

were used as subjects. The further finding that 43% of the students still accepted their religious training argues for considering the possibility that religion may well influence such personality traits as LOC.

As mentioned previously, Shraugher and Silverman (1971) found that the LOC of members of the Jewish, Catholic, and Protestant faiths differed significantly as moderated by church attendance. Although they did not investigate the differences between Protestant denominations, Glock and Stark (1966), and Poppleton and Pilkington (1963) maintain that there are more differences between the Protestant denominations than between the three major faiths, and that to attempt to group the Protestant denominations together, as has been done in the past, can obscure important differences.

From this discussion it can be seen that Judeo-Christian writings conflict as to the degree to which man possesses the ability to control his outcomes. Religious and parental teachings may result in individual differences in one's image of God which has been found to correlate with LOC, and research has indicated that there are significant differences between the Jewish, Catholic, and Protestant faiths in the LOC of their members. Also, several researchers have found more theological differences in the way that doctrine presents the image of God and the degree of control man has over his outcomes.

Dimensions of LOC

In this subsection it will be shown that significant differences have been found between Protestant denominations on variables which appear to be associated with the construct of LOC. The construct of LOC will be examined and related to research findings on the differences between the Protestant denominations. Hypotheses will be developed

predicting differences in the LOC of the members of the major Protestant denominations.

Rotter (1966) at first maintained that LOC was unidimensional. However, subsequent research (Collins, 1974; Duffy et al., 1977; Gurin et al., 1969; Joe & Jahn, 1973; Mirels, 1970) indicated that the construct is multidimensional, and in his latest report (1975) Rotter himself accepted the multidimensionality of LOC.

An examination of Table 1 reveals that although there is general agreement as to the multidimensionality of LOC, the findings as to the dimensions of the subfactors are inconsistent. There appear to be three possible reasons for the inconsistency. First, the methods of factor analysis and the criteria for determining a significant factor loading have varied among the researchers. Second, different LOC scales have been used, and used in varying combinations with other scales.

Mirels used the original Rotter scale, while Joe and Jahn used the original scale, but asked the subjects to indicate the degree of agreement between the internal and external pairs on a six-point, agree-disagree format. Using a slightly different approach, Collins (1974) split each question of the Rotter scale (the internal and external choices) into two separate questions (for a total of 46 questions) and used a Likert scale format. While Joe and Jahn (1973) did not report on the correlation between their instrument and the Rotter scale, Collins reported a total score correlation of .82 indicating that the instruments were very similar. He did not, however, report the correlation between the individual items in the two scales after his scale items had been randomly mixed with additional questions. Gurin et al. (1969) noting the inconsistencies between their factors and those of other researchers,

Table 1
Results of Factor Analyses of LOC Scales From Past Research

| Experimenter | Sample (N) | Factor I | Factor II | Factor III | Factor IV | Factor V | Identification of Factors |
|-------------------------------------|--|--|--|---------------------------------|---------------------------|----------|---|
| (1970) Mireis | (316) College Students | 4,10,11 15,16,23 25,28 | 12,17, 22,29 | | | | I Ability, hard work vs luck II Influence over social system |
| (1969) Gurin et al. | Negro College Students (1595) | 6,7,10,11 16,19,20 23,26 | 9,28,13 15,25 | 17,3 | | | I Control Ideology II Personal Control III System Modifiability |
| (1973) ^a Joe and Jain | (288) College Students | 11,12,16 20 | | | | | I Hard work skill vs chance II Citizen's Effect on Political and World Affairs |
| (1974) ^b Collins | (300) College Students | 46,56,5A 9A,10B,11B 16A,18A,23A 28B | 2B,4A,5A 6B,7B,10A 21AB,23B 26B,28A | 2A,9B,11A 15A,16B,19B 25B | 3AB,12AB,17AB 22AB,29B | | I Difficult-Easy World (complexity, powerlessness) II Just-Unjust World (Competency) III Predictable-Unpredictable world (denial of luck) IV Politically Response-- Unresponsive world (control over political system) |
| (1977) ^c | (275) | 4B,16A,25A | 7B,21B,26A | 2A,18B,25B | 12A,17B,22B | 3AB,7A | Duffy factors are same as Collins. |

^aThe numbers listed under each factor refer to the items as numbered in Rotter's (1966) scale

^bLikert Scale formats used in these studies.

^cThe identification or titles of the factors are those assigned by the Researcher(s) with the exception of the parenthesis which are comments added by this author.

commented that the inclusion of other items in, or in conjunction with the LOC scale might have sensitized the respondents and affected the composition of the factors. Third, Rotter (1975) claimed that the differences in the factor structure reported by the researchers were not related to the construct of LOC, but to the nature of the sampled populations. It may be that the development of factors for specific populations could improve the predictive validity of the scale for specific populations if one is willing to accept the loss in generality.

Despite the lack of consistency in the factors reported by the various researchers, an examination of Table 1 does reveal common concepts or subfactors, although the items contained in the factors vary. The most consistently reported factor was that involving the individual's perception of the degree of control one has over the political system, or powerful others (Mirels, & Joe & Jahns factor 2, Gurin et al.'s factor 3, & Collins & Duffy's factor 4). The other common theme refers to the individual's perception of internal control versus a lack of control because the world has no underlying order in the sense that outcomes are controlled by luck or chance. In a very similar manner the individual may perceive that although the world has an underlying order, that order is too complex to be understood. This construct is common to the first factor reported by all the researchers in Table 1.

The research indicating that individuals appear to perceive themselves as either in control of their outcomes or not in control of their outcomes because of the lack of order in the world, the complexity of the world, or because the outcomes are controlled by powerful others, can lead to other logical implications. Seeman and Evans (1962) referred to Rotter's scale as the "alienation scale." Seeman (1959) identified five

alternative meanings of alienation: powerlessness, meaninglessness, normlessness, isolation, and self-estrangement. He interpreted powerlessness, "This variant of alienation can be conceived as the expectancy or probability held by the individual that his own behavior cannot determine the occurrence of the outcomes or reinforcements he seeks." (p.784) However, he limits powerlessness further to the individual's influence over the political system. It can be seen that Seeman's powerlessness is identical to the previously discussed first factor. However, LOC embodies still another dimension of powerlessness as a perception by the individual of the degree that his outcomes are controlled by himself versus chance (in the sense that the world is unordered, or too complex to cope with). It is also logical that those who feel that they are controlled by external forces are unlikely to value a sense of accomplishment or competency as they would not perceive a connection between their behavior and the resulting outcomes (Collins et al., 1973; Gurin et al., 1969; Runyon, 1973; Szilagyi & Sims, 1975). It appears then that there are at least three factors constituting the construct of LOC: powerlessness, competency, and a sense of accomplishment.

LOC and Rokeach's Study of Values in Religious Denominations

This subsection will examine a study conducted by Rokeach (1969) in which it was found that the members of the Protestant denominations varied significantly in the importance they attached to certain values, among which were competence, a sense of accomplishment, and salvation. By interpreting and relating these values to the factors of LOC, hypotheses will be developed predicting significant differences in the LOC of members of six Protestant denominations.

Using a National Area Probability Sample of 1,400 Americans over 21 and a sample of 300 college students, Rokeach administered two scales, a "Terminal Values Scale" and an "Instrumental Values Scale." In both of these scales the respondents were asked to rank a list of 18 values in order of their perceived importance (see Appendix A for the instruments). Rokeach defined Terminal Values as, "Preferred end-states of existence," and Instrumental values as, "Preferred modes of behavior."

The most highly significant Terminal Value distinguishing among denominations was "Salvation" (median test = $p < .001$). The denominations were ordered as follows on the value they attached to "Salvation." (The ranking attached to "Salvation" by denomination is indicated in the parentheses with 1 equalling the highest value and 18 the lowest value): Baptist (3), Lutheran (9), Methodist (10), Episcopalian (10), Presbyterian (11), and Congregational (11). Rokeach theorized that, "those who valued salvation have an other-worldly orientation which would appeal to those who feel powerless and that they exert little or no influence in affecting the course of political and social events in their society." (p.5) Note how similar this description of those who value salvation is to Seeman's (1959) concept of powerlessness as the individual's sense of a lack of influence over the political system. Nunn (1964) also maintained that powerless people would tend to seek a religion which especially denies the competence of the actor and exalts the direct control of man's affairs by God. He identified such churches as Baptist sects and Southern Baptists (among others). He held that those who do not feel powerless would seek such churches as the Methodist and Presbyterian. Although Nunn did not explain why this should be, it appears logical that the denominations vary from those who emphasize the powerlessness of man

(Baptist) to those who emphasize man's ability to control his own life through the exercise of free will, as may be the case with the Methodist and Presbyterian churches.

Rokeach also found a significant difference between denominations on their ranking of the terminal value "A Sense-of-Accomplishment" (median test = $p < .012$). The rankings were: Episcopalians (4), Congregationalists (6), Lutherans (7), Presbyterians (9), Methodists (12), and Baptists (12). In a previous discussion it was asserted that externals would not value a "sense of accomplishment" as they would not perceive a connection between their behavior and the resulting outcomes.

In his discussion of the Instrumental Values scale, Rokeach identified seven items as "competence" values. He defined these values as "preferred modes of behavior which, when violated, lead to shame about competence rather than guilt about wrongdoing" (Rokeach, 1973, p. 142). He identified the seven values as: ambitious, broadminded, capable, imaginative, independent, intellectual, and logical. The following are the rankings of the three competence values that differed significantly among denominations according to median tests.

| | Bapt. | Method. | Epis. | Pres. | Luth. | Cong. |
|-------------|-------|---------|-------|-------|-------|-------|
| Broadminded | 7 | 2 | 3 | 3 | 5 | 2 |
| Capable | 14 | 9 | 6 | 5 | 10 | 13 |
| Logical | 14 | 17 | 15 | 16 | 15 | 16 |

An examination of the rankings indicates that the Baptists tended to rank competency values lower than the other denominations while the Episcopalians and Presbyterians tended to rank the competency values the highest. Runyon (1966) contended as a result of his studies on LOC that those who feel that the world is controlled externally perceive little opportunity to demonstrate competency.

Table 2 was constructed by measuring the differences in medians between the Baptists and the other denominations for salvation, sense of accomplishment, logical, capable, and broadminded as reported by Rokeach in his 1973 study. For example, the median differences shown in the table for salvation were derived as follows. The median scores for each of the denominations on the value of salvation were: Baptists 4.4, Methodists 8.7, Episcopalians 13.0, Presbyterians 10.0, Lutherans 8.8, and Congregationalists 9.3. The median of 4.4 for the Baptists was used as the zero reference point and the differences between the Baptists and the other denominations were computed by subtracting the median score of the Baptists from the median score of each of the other denominations.

Hypotheses Related to LOC and Religious Denominations

If externality is positively correlated with placing a high value on the value salvation, and if externality is negatively correlated with high values on a sense of accomplishment and the competence values, it appears logical to form the following hypotheses:

1. Protestant denominations will vary significantly on the dimensions of LOC. The direction of the differences in LOC from the most internal will be as follows: Baptist, Methodist, Congregational, Lutheran, Presbyterian, and Episcopalian.
2. Internals will place a higher degree of importance on the values sense of accomplishment, broadminded, capable, and logical than will externals.
3. Individuals who place a high degree of importance on the value of salvation will be more external than those who place a low degree of importance on the value of salvation.

Table 2

Median Differences Between Baptists and Other Denominations on Rokeach's Value Scale

| | Baptist | Methodist | Episcopalian | Presbyterian | Lutheran | Congregational |
|-------------------------|---------|------------|--------------|--------------|------------|---------------------------------------|
| Broadminded | 0 | 1.8 | 2.2 | 2.2 | .4 | 2.9 ($\underline{p} < .054$) |
| Capable | 0 | 1.2 | 2.2 | 2.7 | .7 | .5 ($\underline{p} < .020$) |
| Logical | 0 | .8 | 3.4 | 2.6 | 2.0 | 2.1 ($\underline{p} < .006$) |
| Sense of Accomplishment | 0 | 1.1 | 4.0 | 1.3 | 2.0 | 2.8 ($\underline{p} < .012$) |
| Salvation | 0 | <u>4.3</u> | <u>8.6</u> | <u>5.6</u> | <u>4.4</u> | <u>4.9</u> ($\underline{p} < .001$) |
| | | 9.2 | 19.4 | 14.4 | 9.5 | 13.2 |

Significance levels determined by Chi Square Median Test.

4. Members of the various Protestant denominations will vary significantly as to the degree of importance they place upon the value of salvation. The order of the differences, from the denomination which places the highest importance on salvation to the one which places the lowest importance on salvation, will be as follows: Baptist, Methodist, Lutheran, Congregational, Presbyterian, and Episcopalian.

LOC and Leadership

This subsection will examine relationships between 1) LOC and the leader's behavior (as perceived by the leader), and 2) the follower's LOC and his perceptions of his leader's behavior. The possible reasons for the inconsistencies in past research will be discussed, and a rationale will be developed to provide for testable hypotheses directed towards resolving these inconsistencies.

Inconsistencies in Past Research

Examination of Table 3 indicates that the findings of the studies on the relationship between: 1) LOC and the leader's behavior, and 2) the follower's LOC and his perceptions of his leader's behavior, are inconsistent. Durand and Nord (1976) found that external followers (those scoring high on Rotter's scale) tended to perceive that their leaders exhibited more structuring behaviors than did internal followers. Evans (1974) reported that external followers tended to perceive that their leaders exhibited less structuring behaviors than did internal followers, while Pryer and Distefano (1972) reported finding no significant relationship between the follower's LOC and their perceptions of the leader's structuring behavior.

Table 3

Relationships Between the Follower's LOC and
His Perceptions of the Leader's Behavior
From Prior Research

| <u>Researcher</u> | <u>Structure</u> | <u>Variables</u> | <u>Consideration</u> |
|---------------------|------------------|------------------|----------------------|
| Durand and Nord | +.33* | | ns |
| Evans | -.26** | | -.25* |
| Pryer and Distefano | ns | | -.32* |

Relationships Between the Leader's LOC and
His Leadership Behavior From
Prior Research

| <u>Researcher</u> | <u>Structure</u> | <u>Variables</u> | <u>Consideration</u> |
|----------------------|------------------|------------------|----------------------|
| Durand and Nord | +.38* | | +.36* |
| Goodstadt and Hjelle | -(ANOVA) | | -(ANOVA) |

* $p < .05$

** $p < .01$

Evans and Pryer and Distefano both reported that external followers tend to perceive their leaders as less considerate than did internal followers, while Durand and Nord found a nonsignificant relationship, but in the same direction as the other researchers just discussed.

As to the relationship between LOC and the leader's behavior, only the two studies referenced in Table 3 appear to have been published, and the criteria used in the two studies are not directly comparable. This author's interpretation (to be discussed later in detail) is that the findings of the two studies are inconsistent. Durand and Nord (1976) reported that external leaders were perceived to be both more structuring and more considerate than internal leaders. Goodstadt and Hjelle (1973) reported that external leaders tended to exercise more coercive power on their followers than did internal leaders, and internal leaders tended to exercise more persuasive power on their followers than did external leaders.

The reasons for these inconsistencies may be the results of differences in the criterion variables and the instruments used to measure both the predictor and the criterion variables. All four studies used Rotter's LOC scale as the predictor variable. However, Goodstadt and Hjelle, Evans, and Pryer and Distefano used the total score on the scale while Durand and Nord used the subscales reported by Gurin et al. (1969) with one modification. From the discussion in the previous subsection, it will be recalled that the general themes underlying the concept of LOC are somewhat consistent; i.e., the external forces which may control one's life are complexity, lack of underlying order in the world, or powerful others. There does not, however, appear to be a general consensus as to exactly what items make up those themes. Furthermore, although Durand

and Nord used Gurin et al.'s two factors, Control Ideology and Personal Control, they did not use the two questions that Gurin et al. reported as comprising the third factor, System Modifiability. Rather, they lumped the remaining six questions in the Rotter scale into a single factor which they identified as "I-E Residual." Of the six questions not included in Gurin et al.'s System Modifiability, only three seem to be logically acceptable. Question 3 (See Rotter's scale in Appendix A) deals with the individual's ability to influence government decisions, question 22 deals with the individual's control over politicians, and question 5 which deals with whether or not teachers are unfair to their students, could be construed to tap the dimension of control by powerful others which is characteristic of the System Modifiability factor. The other three questions (2, 4, and 21) do not appear to fit into this factor (see Rotter's instrument in Appendix A for the questions).

The logic of Durand and Nord's use of the subscales seems questionable. Gurin et al. admitted that their factors might not be representative of the white population as their subjects were black. It would appear that unless the factor structure could be proven to be characteristic of the sample population, its use as a predictor variable is of dubious value. Of all the factor analyses of the Rotter scale, only one has been conducted using a non-college population. It should also be pointed out, that of the four significant relationships reported by Durand and Nord, three were based on the predictor variable I-E Residual.

Pryer and Distefano (1972), Evans (1974), and Durand and Nord (1976) used various combinations of Stogdill's (1963) Leader Behavior Description Questionnaire (LBDQ - Form XII) to measure the criterion variables. Both Pryer and Distefano, and Durand and Nord used the two subscales of

the LBDQ - Form XII "Consideration" and "Structure" while Evans summed three subfactors of the LBDQ - Form XII to arrive at scores for consideration and structure. Consideration consisted of the sum of the consideration, tolerance of freedom and integration subscales while structure consisted of the structure, role assumption, and production emphasis subscales. The use of the subscales may be justified, but the amount of unique variance contributed by each of the subscales may well contribute to the reason for the lack of agreement between Evan's findings and those of the other researchers.

Discussion of Past Research Findings

Rather than using the follower's perceptions as a measure of the leader's behavior, Goodstadt and Hjelle (1973) used the experimenter's observations of the leader's behavior as their measure. The criterion were French and Raven's (1959) forms of power, reward power, expert power, and coercive power. As stated previously, they found that external leaders used significantly more coercive power than did internal leaders ($p < .05$), and that internal leaders used significantly more persuasive power (encouragement, praise, setting new standards, and admonishment) than did external leaders ($p < .05$).

Evan's (1974) used the previously discussed dimensions consideration and structure as perceived by the followers as the predictor variables with LOC and found that external followers perceived their leaders to be both less structuring and less considerate than did internals. While Goodstadt and Hjelle's predictor variables are not necessarily identical to those used by Evans, it may be reasonable to assume that coercive power is the opposite of considerate behavior. Stogdill (1963) describes consideration as "Regards the comfort, well-being, status and contributions

of the followers" (p. 3). Similarly, it may be argued that persuasive power is similar to two of the three subscales of the LBDQ - Form XII structure and production emphasis which were summed by Evans for the structure score. Structure is defined by Stodgill as, "clearly defines own role, lets followers know what is expected" and production emphasis as, "applies pressure for productive outputs." Schriesheim and Stodgill's (1975) analysis of these scales maintains that the scales contain a minimum of punitive concepts (which may be taken as a minimum degree of coercive power). If one accepts these definitions, the two studies appear to report consistent findings.

Durand and Nord (1976) reported that followers who were external (as measured by the I-E Residual subscale) tended to perceive their leaders as more structuring than did internal followers ($p < .05$). They reported a nonsignificant relationship between LOC and consideration. Durand and Nord claimed that their findings were consistent with those of Goodstadt and Hjelle, a questionable contention. Durand and Nord equate structure as measured by the LBDQ - Form XII with Goodstadt and Hjelle's coercive power. However, as discussed previously, Schriesheim and Stodgill's (1975) analysis suggests that the LBDQ - Form XII measures a minimum degree of arbitrary or punitive leader behavior. Further Evans (1974) postulates that rewarding behavior and consideration are very similar constructs. Therefore, Durand and Nord's findings do not appear to be consistent with either of the previously discussed studies.

Pryor and Distefano (1972) reported no significant relationship between LOC and structure. At one hierarchical level of the three investigated, they found that internal followers perceived their leaders as more considerate than did external followers ($p < .01$). The finding of no

significant relationship between the follower's LOC and structure conflicts with the findings of both Evans and Durand and Nord, while the finding of a significant relationship between the follower's LOC and consideration agrees with that of Evans.

At this point in the discussion, it is important to emphasize the difference between Goodstadt and Hjelle's study and the findings of the other researchers which have been discussed thus far. From Goodstadt and Hjelle's methodology (of observing the leader's behavior and administering the LOC scale to the leader) it can be seen that the effect on the follower's LOC on the perceptions of the leader's behavior have been minimized (admitting that there may still be an interaction between the follower's LOC and his behavior which would in turn affect the leader's behavior). While both Durand and Nord, and Goodstadt and Hjelle report findings on the possible relationship between the leader's LOC and his behavior, Durand and Nord measure the leader's behavior in terms of the follower's perceptions of that behavior and therefore, the relationship between the leader's behavior and his LOC is confounded by the follower's LOC as it may affect his perceptions. As Durand and Nord combined the various LOC factors used to measure the LOC of the leader and the follower to find the best predictor of the leader's consideration and structuring behaviors, it is possible to gain some insight into the relative importance of the effects of both the leader's and the follower's LOC on the follower's perceptions of the leader's behavior. In predicting the leader's structuring behavior, they found the leader's Personal Control Factor accounted for 14% of the variance in the leader's perceived behavior and the follower's I-E Residual factor of the LOC scale accounted for an additional 10% of the variance, suggesting that the

leader's LOC may be slightly more important to the relationship. When predicting the perception of the leader's consideration behaviors, they reported that the leader's I-E Residual factor accounted for 13% of the variance while none of the follower's LOC factors made a significant contribution to the prediction of leader consideration. While these regressions provide some indication of the relationship between the leader and the follower's LOC and the leader's behavior as perceived by the follower, it is still not possible to determine the relationship between the leader's LOC and his true behavior from Durand and Nord's data.

From this discussion of the leadership literature, it appears that the effectiveness of the leader depends upon a complex circular relationship including many moderating variables and interactions. The leader's personality, combined with situational factors such as the nature of the organization and the constraints it places upon the leader, combine to cause the leader to behave in certain ways (say in terms of consideration and structure). These true behaviors, as perceived by the follower, are distorted to an unknown degree by the personality and expectations of the follower who responds with behaviors which are in turn perceived by the leader, and to some degree, moderated or distorted by the leader's personality. The leader then modifies his behavior in an attempt to influence the follower's behavior in a manner which the leader hopes will gain his goals. This leader behavior is then perceived and reacted to by the follower and the cycle repeats itself. The main thrust of this portion of the study is to attempt to clarify how much of this distortion in the follower's perception of the leader's behavior can be attributed to the follower's LOC and how the leader's behavior is affected by his own LOC.

Comparing the findings of Durand and Nord with those of Goodstadt and Hjelle still reveals conflict. If it were assumed that the follower's perceptions were veridical, the external leaders in the Durand and Nord study were found to be both more structuring and more considerate than internal leaders. Goodstadt and Hjelle (who did not rely on the follower's perceptions to measure leaders behavior) found, however, that external leaders were both less structuring and less considerate than internal leaders.

From the foregoing discussion it can be seen that, with the possible exception of Goodstadt and Hjelle's study, the relationship between the leader's LOC and his behavior is still unclear. Some clarity might be achieved if the effect of the follower's LOC and his perceptions of the leader's behavior could be isolated. Some increased understanding of the relationship may be attained if one considers how LOC as a generalized expectancy should affect the follower's perceptions of the leader's behavior.

In his 1975 discussion of LOC, Rotter makes a very important statement when he points out the different roles that generalized and situation-specific expectancy play in the prediction of behavior. The more novel and ambiguous the situation, the more impact generalized expectancy will have on the individual's attitudes and behaviors. As the situation becomes more routine and unambiguous, the importance of generalized expectancy decreases and that of situation-specific expectancy increases. In this discussion Rotter assumes that experience in the situation derived from environmental clues is responsible for the shift from general to situation-specific expectancy. However, research indicates that externals are far less likely to perceive, and utilize, the

environmental clues to modify their attitudes and behaviors. It would appear that previous research has virtually ignored this particular aspect of LOC. It would seem that if LOC were a strong enough personality trait, it might be that externals would be so oblivious to the environmental clues that only minor shifts toward situation-specific expectancy would occur over relatively long periods of time.

Pryor and Distefano's findings that LOC was significantly related to the follower's perceptions of leadership behavior at only one of three hierarchical levels is particularly interesting in the light of the roles generalized and situation-specific expectancies are postulated to play in the determination of the follower's attitudes and behaviors. The average tenure of the subjects at the hierarchical level in which the significant relationship between the follower's LOC and his perceptions of the leader's consideration behaviors was 94 months versus 15.4 and 43 months for the hierarchical levels in which LOC had no significant relationship to perceived leader behavior. Rotter's theory would predict that LOC as a generalized expectancy would be less ambiguous. It is apparent that more research is required to determine the moderating effects of tenure on the relationship between the follower's LOC and his perceptions of the leader's behavior.

The Hypotheses

From this review of the theories concerning the behavioral implications of LOC, it appears that one result of external LOC might be a passive approach to leadership behavior. If the individual as a leader does not perceive that outcomes are contingent upon his behavior, either because the outcomes are controlled by chance, or because of a sense of powerlessness, it seems possible that he would resort to a laissez-faire style of

leadership. In this case, the leader should be perceived as being low in both consideration and structuring behaviors.

Similarly, if the sense of powerlessness results from low self-esteem and a feeling of inferiority, the leader may be driven to strive for power over others (Phares, 1976). As previously discussed, in the discussion of Goodstadt and Hjelle's study, the drive for power over others should result in low consideration behavior. Similarly, as the structure scale of the LBDQ - Form XII contains only a minimum measure of coercive, or punitive behavior, the external leaders should score lower than the internal leader on this scale. Thus we would expect to find a significant negative correlation between the leader's total score on the LOC scale and his score on the consideration and structure subscales of the LBDQ - Form XII.

If, as Phares (1976) argues, externals have a feeling of powerlessness, and as Runyon (1973) maintains, are less motivated and show less job involvement, it seems likely that they would perceive their leader as more structuring than would internal followers. Part of the perception may be moderated by the follower's LOC and part may be veridical in that the leader must actually behave in a more structuring and less considerate manner in order to obtain satisfactory performance.

Durand and Nord (1976) predicted that external followers would perceive the leader to be low in consideration because the follower would be reluctant to attempt to influence the leader by making his needs known. The leader, being unaware of these needs, would make no effort to satisfy them, and thus would be perceived as low in consideration.

The negative relationship between LOC and the follower's perception of considerate behavior on the part of the leader appears to be indirectly

supported by the findings that externals express lower job satisfaction than internals (Duffy et al., 1977; Lichtman, 1970; Mitchell et al., 1975; Organ & Green, 1974). Stogdill's (1974) review of the leadership literature reports that 12 of 14 studies found a positive correlation between follower satisfaction and leader consideration behavior (of the remainder, one finding was nonsignificant, and the other reported a negative correlation). As these were correlational studies, causality cannot be determined. It is possible that the external followers tend to perceive their leaders as low in consideration which in turn leads to the reported lower job satisfaction of externals as compared to internals.

From the foregoing discussion, it seems reasonable to predict the following hypotheses:

5. Internal leaders will perceive themselves to behave in a more structuring and considerate manner than will external leaders.

6. External followers will perceive their leaders to be more structuring than will internal followers.

7. External followers will perceive their leaders to be less considerate than will internal followers.

8. Follower perceptions of the leader's behavior will be moderated by the length of time they have been associated with that leader.

SECTION III

METHOD

Subjects

To test the hypotheses related to the relationship between LOC and religious denominations and LOC and the follower's perceptions of their leader's behavior, a subject population was drawn from two churches in each of the six major Protestant denominations located near the University of Florida. The major denominations are Episcopal, Lutheran, Methodist, Presbyterian, Congregational, and Baptist. The churches were selected from each of the denominations based upon the recommendations of the Department of Religion, University of Florida that these churches were the most representative of their denominations. If access to the first choice of churches was denied, the next most representative church on the list was to be selected until access was gained or that denomination eliminated from the study for lack of access. Two churches were chosen from each denomination to provide for comparison of within and between denomination variance on the variables of interest.

The researcher's first step was to make an appointment with the minister of each church, explain the purpose of the survey, and gain access to the congregation. In no case was access denied; however, in three cases additional approval of the church's governing body was required (one Lutheran and two Presbyterian). In the case of the Lutheran church, a formal written request was required (see Appendix B). In the other two churches, the ministers requested approval verbally.

At the initial meeting with the minister, the purpose of the survey was explained, the minister was given a copy of the questionnaire with a cover letter of explanation and instructions for the subjects. In addition, a short written notice was provided from which the minister could make a verbal or written announcement of the survey to the congregation (see Appendix B). A request was also made to administer the questionnaires to members of adult Sunday school classes during their Sunday sessions so as to provide the maximum control over the conditions under which the survey was conducted and to increase the response rate. The first church, a Methodist church, gave this permission. The success of the proposal was attested to by the fact that a 100% response rate was achieved. Sixty-two subjects responded before the survey of that church was terminated. Unfortunately, this procedure was either not acceptable to the other churches because the time involved detracted from their classes, or because classes were not held during the summer months in which the survey was conducted.

With the exception of the one Methodist church, the questionnaires were delivered to the minister who made them available to his congregation on a voluntary basis. The completed questionnaires were picked up at the church by the researcher and there was no direct contact between the researcher and the subjects. As the data collection progressed, it became apparent that the response rate from the Lutheran and Presbyterian churches was going to be lower than desired. In the Presbyterian churches, an additional attempt was made to increase the response by delivering an additional 36 questionnaires. When this attempt was unsuccessful, a third church was contacted and access was approved. In the case of the Lutherans, one of the selected churches was too small,

consisting of only 40 members of whom six responded. As in the case of the Presbyterians, a third church was contacted and access was granted. In the case of the Congregationalists, there was only one church in the area consisting of 130 members.

Table 4 provides a description of the sample population. A total of 557 questionnaires were distributed over a period of two and one half months and 261 were returned for an overall response rate of 47%. Within the denominations, the response rate ranged from a low of 30% for the Presbyterians to a high of 77% by the Methodists. The sample contained slightly more females than males (57% female), and the average age of the population was 43. Fifty percent of the sample attended church and/or Sunday school at least twice a week and 40% of the sample attended church or Sunday school once a week. Only 10% of the sample were infrequent church goers. To determine if the differences in sex, age, or attendance were significantly different between churches, a chi-square test of the differences was conducted. All differences were non-significant with the exception of age which differed significantly ($p < .0074$, Eta square = .12). This significant difference will be discussed later in the analyses.

To test the hypotheses related to LOC and leader behavior, each of the 13 ministers of the churches involved in the survey was personally briefed on the purpose of the survey and given a questionnaire containing the leader's version of the LBDQ - Form XII and the LOC scale. The values scale was omitted in hopes of increasing the response rate. To increase the size of the leaders sample, 30 additional questionnaires were mailed to Protestant ministers selected at random from the yellow pages of the telephone book. These ministers were sent a copy of the

Table 4
Sample Population Characteristics

| Denomination | N | % Return Rate | % Males | Average | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----------------------|-----|---------------|---------|---------|----|----|----|---|---|---|---|
| <u>Baptist</u> | | | | | | | | | | | |
| Church 1 | 36 | 80 | 52 | 39 | 49 | 30 | 15 | 0 | 6 | 0 | 0 |
| Church 2 | 9 | 20 | 50 | 42 | 88 | 0 | 13 | 0 | 0 | 0 | 0 |
| Total | 45 | 50 | 51 | 40 | 56 | 24 | 15 | 0 | 5 | 0 | 0 |
| <u>Congregational</u> | | | | | | | | | | | |
| Church 1 | 15 | 33 | 50 | 40 | 29 | 57 | 7 | 0 | 0 | 0 | 7 |
| <u>Episcopal</u> | | | | | | | | | | | |
| Church 1 | 35 | 78 | 42 | 47 | 26 | 58 | 7 | 3 | 0 | 3 | 3 |
| Church 2 | 13 | 29 | 36 | 46 | 27 | 64 | 9 | 0 | 0 | 0 | 0 |
| Total | 48 | 53 | 40 | 47 | 26 | 60 | 7 | 2 | 2 | 2 | 2 |
| <u>Lutheran</u> | | | | | | | | | | | |
| Church 1 | 7 | 16 | 14 | 39 | 43 | 57 | 0 | 0 | 0 | 0 | 0 |
| Church 2 | 6 | 30 | 33 | 57 | 33 | 67 | 0 | 0 | 0 | 0 | 0 |
| Church 3 | 20 | 44 | 44 | 46 | 32 | 63 | 5 | 0 | 0 | 0 | 0 |
| Total | 33 | 30 | 35 | 45 | 34 | 63 | 3 | 0 | 0 | 0 | 0 |
| <u>Methodist</u> | | | | | | | | | | | |
| Church 1 | 62 | 100 | 44 | 40 | 75 | 24 | 2 | 0 | 0 | 0 | 0 |
| Church 2 | 20 | 44 | 50 | 50 | 50 | 40 | 5 | 5 | | | |
| Total | 82 | 77 | 45 | 43 | 68 | 28 | 3 | 1 | 0 | 0 | 0 |
| <u>Presbyterian</u> | | | | | | | | | | | |
| Church 1 | 18 | 40 | 33 | 40 | 56 | 39 | 6 | 0 | 0 | 0 | 0 |
| Church 2 | 20 | 24 | 33 | 56 | 53 | 26 | 13 | | | | 7 |
| Total | 38 | 30 | 33 | 46 | 55 | 33 | 9 | 0 | 0 | 0 | 3 |
| Sample Average | 257 | | 43 | 43 | 50 | 40 | 7 | 1 | 1 | 4 | 1 |
| Chi Square | | | ns | .0074 | ns | | | | | | |

LBDQ - Form XII and the LOC scale along with a letter requesting his participation in the survey (see Appendix B). In addition, a self-addressed, stamped envelope and a post card which could be returned separately (to protect subject's anonymity) if the results of the survey were requested.

Two weeks after the mailing, only two questionnaires had been returned whereupon the researcher attempted to contact each of the 32 ministers by telephone. In the subsequent three-week period, contact was made with 12 of the 32 (38%). Of these contacted, only one openly refused to participate. The final sample consisted of 20 ministers for a 47% response rate.

For those who may question the use of ministers as suitable subjects for the study of leadership, it must be admitted that the research on the leadership characteristics of ministers is sparse. Glasse (1968) maintained that the minister's position in the church had the characteristics of a top-level organizational leadership position, and Stogdill (1963) included ministers in his studies of the Leader Behavior Description Questionnaire. An examination of his reported data in Table 5 does not appear to indicate any substantial differences between the scores on consideration and structure subscales for the ministers and other professions such as army and highway patrol offices, community leaders, etc.

Table 5
Comparison of LBDQ - Form XII Scores for
Ministers and Other Leaders

| | <u>Structure</u> | |
|----------------|----------------------|------------------|
| | <u>Entire Sample</u> | <u>Ministers</u> |
| Mean | 38.2 | 38.7 |
| S.D. | 5.2 | 4.7 |
| Range of Means | 36.6 - 39.7 | |

| | <u>Consideration</u> | |
|----------------|----------------------|------|
| Mean | 40.1 | 42.5 |
| S.D. | 5.3 | 5.8 |
| Range of Means | 37.1 - 42.5 | |

The follower's perception of ministers as high in consideration behaviors appears to be associated with leaders who require the support of their followers to hold their positions of leadership as the other two professions highest on consideration behavior are community leaders and labor union presidents.

Instruments

The LOC Scale

Benson and Spilka commented:

Rotter's scale defines external control in terms of luck, fate, and chance. While it seems reasonable to argue that one who places his fate in God's hands is externally controlled, he may find options phrased in luck and chance terminology irrelevant. (1973, p. 308)

This comment appears to be particularly relevant to this study which seeks to determine if there is a relationship between LOC and religious denominations. It was therefore decided to devise and test a modified LOC scale which would include the concept of God as an external source of control.

Two pilot studies were conducted to determine whether a modified LOC scale adding the concept of God as an external alternative would change the nature of the results from the original scale and add to the construct of LOC.

In pilot study number one, a modified LOC questionnaire was developed which was very similar to Rotter's scale, but inserted God as the external alternative (see Appendix A). For example, Rotter's external alternative to question number two is, "Many of the unhappy things in people's lives are partly due to bad luck." The modified alternative to this question was, "Many of the unhappy things in people's lives are partly due to the will of God." The two questionnaires (Rotter's scale and the modified questionnaire) were administered to a sample of 75 undergraduate business students and 32 members of adult Sunday school classes at a local Methodist church. Half of the subjects were administered Rotter's scale first, and half were administered the modified scale first. A correlation matrix of the whole sample (Table 6) revealed moderate correlations between like-numbered items on the two scales, averaging .30 for 14 of the 23 questions ($p < .05$) while the correlation matrix for the Methodist sample (Table 7) revealed that only four of the like-numbered items correlated significantly.

These results appeared to indicate that individuals belonging to religious groups discriminate between luck, fate, chance, and God as external forms of control more than do groups of students. A t-test for correlated groups indicated a significant difference between the total scores for the two instruments for the whole sample ($p < .001$). The correlation between the two test scores was .32 ($p < .001$) indicating a shared variance of 10% between the two instruments. The results of this

Table 7

Correlation Matrix (Methodist Sample) Rotter's Scale Versus Modified Scale

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|----|----|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 59 | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | 57 | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | 46 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | | | |

Numbers on the vertical are the questions on the modified scale. Horizontal numbers are Rotter scale questions. All correlations shown are significant ($p < .05$).

study appeared to indicate that the addition of God as an external source of control resulted in a very different LOC score which shares little in common with the original LOC scale. Further, part of the difference (as expected) could be due to the fact that the subjects were given only an external alternative (God) in the modified scale which did not tap the whole of the LOC construct.

The second pilot study was designed to provide an instrument which might measure the full dimension of the LOC construct by including the original external alternatives fate, luck, chance, and powerful others, plus the concept of God as still another external alternative. This new instrument was reduced in length by removing the six filler questions contained in the Rotter scale and the three questions dealing with the student's perceptions of control by teachers which were considered irrelevant to adult, non-student populations. The new scale also used a Likert scale and split Rotter's internal-external alternatives into two separate questions (20 internal and 20 external) and added 20 additional items presenting God as the external alternative which were drawn from the scale used in the first pilot study. The new scale consisted of 60 questions, 20 internal control choices, 20 external control choices from Rotter's scale, and 20 external alternatives in which God is the external control. The total score on the modified scale was computed by reversing the scores on the internal alternatives and summing the scores on the 60 questions (see Appendix A).

This scale and Rotter's scale were administered to 35 undergraduate business students, alternating the order of administration in the same manner as in the first study. The correlation of Rotter's scale with the portion of the new questionnaire derived from Rotter's scale (the 20

internal and 20 external alternatives now using a Likert scale) was .76 ($p < .001$) which compares favorably with Collin's finding of .82 (1974). The correlation between Rotter's scale and the total score of the new scale containing the internal and both the external alternatives (60 questions) was .56 ($p < .001$).

The internal reliability (Cronbach's Alpha) was tested in both pilot studies and in the final study. In the first study the Alpha for the Rotter scale was .73, for the modified scale .80, and for both scales combined .82. In the second study, the Alpha for Rotter's scale was .76, for the modified scale without the God alternative .86, and for the complete new scale, the Alpha was .91. The external alternative subscale with God as the external alternative had an Alpha of .94. These findings compare very favorably with those of other researchers who found the internal reliability of Rotter's scale to vary between .65 and .79 with the majority being in the .70's (Joe, 1971). From the results of the pilot studies it was concluded that the addition of God as an external alternative does have a possibility of adding another relevant dimension to the construct of LOC, and that the new scale should be used in the follow-on study.

Rokeach's Values Scales

Rokeach's (1969) Value Survey Instrument measures the individual's value structure through the use of a "Terminal Values and an Instrumental Values Scale." The subjects are presented with an alphabetical list of 18 terminal values and 18 instrumental value and are asked to rank the 18 values in each scale in order of importance. Rokeach maintains that a hierarchy of individual values can be ascertained from these rankings and used to determine the beliefs and attitudes of the subject population

and how these values provide a basis for the development of beliefs and attitudes. The Terminal Values Scale refers to the preferred end-state of existence while the Instrumental Values Scale measures the individual's preferred modes of behavior. In the present study, certain Terminal and Instrumental values will be measured and their relationship to LOC will be examined.

Robinson and Shaver (1973) report a test-retest reliability of ". . . in the 70's" for the values scales. The two full scales contain 18 values in each scale, but for the purposes of this study, only eight values were chosen from each of the scales in order to reduce the size of the survey questionnaire. For the Terminal Values scale, salvation and a sense of accomplishment were chosen as two of the variables based upon the previous discussion of their possible relationship to LOC. Six other values were chosen at random from the same scale to serve as a basis for comparison. Similarly, in the Instrumental Values scale, the values broadminded, capable, and logical were chosen because they are the competence values identified by Rokeach as varying significantly between the Protestant denominations, and because of their previously discussed possible relationship to LOC. The five other values from the same scale (forgiving, helpful, imaginative, independent, and obedient) were chosen at random to serve as a basis for comparison. These eight instrumental and eight terminal values were alternated randomly in forming the scale used in this study with odd numbered questions containing the instrumental values and the even numbered questions containing the terminal values. Within this framework, the order in which the values appeared in each question was determined randomly (see Appendix A).

The score for each value was computed by developing a skewed symmetrical matrix for the instrumental and terminal values. The columns in the matrix were then summed and divided by eight minus any missing values.

The Consideration and Structure Scales

The consideration and structure scales were taken from the similarly identified subscales of Stogdill's (1963) Leadership Behavior Description Questionnaire (LBDQ - Form XII). Stogdill reported that the reliability for the consideration subscales ranged from .76 to .87 with an average reliability of .81, and that the reliability of the structure subscale ranged from .70 to .80 with an average reliability of .76. Two versions of these subscales were used in this study. The consideration and structure subscales using Stogdill's wording were used to measure the follower's perceptions of the leader's behavior. The wording on both of the scales was changed from the third person to the first person to obtain the two scales used to measure the leader's perceptions of his own leadership behavior (see Appendix A). The score for each of the subjects was obtained by averaging the responses on each scale to minimize loss of data. The subject's scores were utilized if a minimum of seven of the 10 items were completed on each of the subscales. The internal reliability for the scales in this study were .92 for consideration and .88 for the structure subscale.

Biographical Data

The biographical data sheet was included in each of the follower's questionnaires to gather data on variables of interest to this study (see Appendix A). With the exception of religious denomination, all variables contained in the data sheet were anticipated intervening or moderator

variables: age, sex, frequency of participation in church activity, and length of association with the minister.

SECTION IV

RESULTS

LOC and Religion

The analysis of the relationship between LOC and religious denominations included an examination of the differences between churches within each denomination, the differences between denominations, an examination of possible moderating or intervening variables, a factor analysis of the modified LOC scale, and a discriminant analysis to determine which variables best predicted group membership.

Differences between the individual churches within the denominations were examined through t-test on the variables LOC, salvation, a sense of accomplishment, broadminded, and capable. None of the churches within the denominations varied significantly on the LOC dimension, but the two Presbyterian churches did vary significantly on the values capable and a sense of accomplishment ($p < .05$).

Differences between the denominations were then examined by one-way analysis of variance. An examination of the literature indicated that two tests were appropriate for a posteriori contrasts when there were unequal cell sizes, the LSDMOD and Scheffé (Nie et al., 1975). However, these methods are the most conservative of the multiple range tests. The results using both methods are as indicated by Table 8. The overall F-test ($p < .0001$) indicates that, in this sample, the denominations differed significantly on the LOC dimension. These findings support hypothesis number one in that the denominations differ significantly on the LOC

dimension; however, the differences were not in the order predicted. The predicted order, from the most external to the most internal, was Baptist, Methodist, Lutheran, Congregational, Presbyterian, and Episcopalian. The order as indicated in Table 8 is Presbyterian, Lutheran, Episcopalian, Baptist, Methodist, and Congregational which is almost the reverse of the order predicted.

Table 8
One-Way Analysis of Variance
LOC by Denomination

LSDMOD

| | | | | | | | |
|----------|------|---|-----|---|------|-----|--------|
| Subset 1 | CON | | | | | | |
| Subset 2 | METH | - | BAP | - | EPIS | | |
| Subset 3 | | | BAP | - | EPIS | - | LUT |
| Subset 4 | | | | | | LUT | - PRES |

Scheffe

| | | | | | | | |
|----------|------|---|-----|---|------|---|------------|
| Subset 1 | CON | | | | | | |
| Subset 2 | METH | - | BAP | - | EPIS | | |
| Subset 3 | | | BAP | - | EPIS | - | LUT - PRES |

Note: Overall F-test ($p < .000$) d.f. 5,235

The hypothesis was based upon Nunn's (1964) finding that powerless individuals tend to prefer Baptist and non-sectarian churches, Rokeach's (1969) findings that religious denominations varied significantly as to the degree of importance they placed on certain values, and this author's predictions of the relationship between LOC and Rokeach's values.

Because of these conflicting findings, the relationship between LOC and these values was examined by product-moment correlation with results as indicated in Table 9. The findings partially support hypothesis number two in that the correlation between LOC and a sense of accomplishment was

Table 9
Correlations Between LOC Subfactors and Rokeach's Values

| Factor | Broadminded | Capable | Values | | Exciting Life | Logical |
|----------------|-------------|---------|----------|----------|---------------|---------|
| | | | Equality | Equality | | |
| I | ns | -.13* | -.21*** | -.20** | -.12* | |
| II | ns | ns | ns | .16* | ns | |
| III | ns | ns | -.24*** | -.16* | ns | |
| IV | ns | ns | .13* | ns | ns | |
| Complete Scale | ns | -.17** | -.17** | ns | ns | |

| | Imaginative | Obedient | Pleasure | Salvation | Sense of Accomplishment |
|----------------|-------------|----------|----------|-----------|-------------------------|
| | | | | | |
| I | ns | .24*** | ns | .37*** | -.19** |
| II | .22*** | -.13* | ns | -.14* | .17** |
| III | ns | ns | ns | .30*** | -.18** |
| IV | .16** | ns | ns | ns | ns |
| Complete Scale | ns | .13* | ns | .33*** | -.16** |

Note: Correlations for LOC with underlined variables are one-tail T-tests. All others are two-tail tests.

-.16 ($p < .01$), and between LOC and capable was -.17 ($p < .01$). However, there was no significant relationship between LOC and the values broadminded and logical. Hypothesis number three was supported by the finding that LOC correlated .33 ($p < .001$) with salvation. These findings confirm that externals place a higher degree of importance on salvation and a lesser degree of importance on the competency variables sense of accomplishment and capable than do internals.

As indicated in Table 10, hypothesis number four was partially supported. The denominations did differ significantly in the importance they placed on salvation. However, the difference was significant only between the Congregationalists and the rest of the denominations ($p < .0001$). Table 10 also indicates that the denominations vary significantly on six values other than salvation: broadminded, equality, an exciting life, imaginative, obedient, and pleasure. There does appear to be a tendency for the denominations to vary on a dimension that could be described as liberal-conservative. The Baptists consistently placed a low value on the variables broadminded, equality, exciting life, and pleasure, while they placed a high value on obedient. The Presbyterians and the Episcopalians occupied the liberal end of the scale by placing a high value on broadminded, equality, an exciting life (except for the Episcopalians who differed on this one item), and a low value on obedient.

The effect of other variables on LOC was examined by hierarchical regression. As the author had no specific theory to support the order in which the variables were to be added to the regression, the variables were entered based on the probability of their having a causal relationship with the other variables in the regression, i.e.; sex, age, frequency of church attendance, and the interactions of sex by denomination, and

Table 10
Significant Multiple-Range Comparisons Between
Denominations on Value Variables

| | | | | | | | | | | |
|--------------------------------|------|---|------|---|------|---|------|---|------|-------|
| Broadminded (<u>p</u> <.0000) | | | | | | | | | | |
| Group 1 | BAP | - | LUT | - | MET | | | | | |
| | | | LUT | - | MET | - | PRES | - | EPIS | - CON |
| Equality (<u>p</u> <.02) | | | | | | | | | | |
| Group 1 | BAP | - | MET | - | LUT | | | | | |
| Group 2 | | | | | LUT | - | EPIS | - | PRES | - CON |
| Exciting (<u>p</u> <.0000) | | | | | | | | | | |
| Group 1 | LUT | - | BAP | - | EPIS | - | MET | | | |
| Group 2 | | | BAP | - | EPIS | - | MET | - | PRES | |
| Group 3 | | | | | | | | | PRES | - CON |
| Imaginative (<u>p</u> < .03) | | | | | | | | | | |
| Group 1 | LUT | - | MET | - | BAP | - | EPIS | - | PRES | |
| Group 2 | | | MET | - | BAP | - | EPIS | - | PRES | - CON |
| Obedient (<u>p</u> < .0000) | | | | | | | | | | |
| Group 1 | CON | - | EPIS | - | PRES | | | | | |
| Group 2 | | | EPIS | - | PRES | - | MET | - | LUT | |
| Group 3 | | | | | PRES | - | MET | - | LUT | - BAP |
| Pleasure (<u>p</u> <.0013) | | | | | | | | | | |
| Group 1 | EPIS | - | BAP | - | PRES | - | MET | - | LUT | |
| Group 2 | | | | | | | | | LUT | - CON |
| Salvation (<u>p</u> < .0000) | | | | | | | | | | |
| Group 1 | CON | | | | | | | | | |
| Group 2 | | | PRES | - | EPIS | - | MET | - | BAP | - LUT |

Note: Multiple-range tests were conducted by LSDMOD.

age by denomination (Nie et al., 1970). The results as shown in Table 11 support the hypothesis that LOC was related to denominational differences as denomination accounted for 15% of the variance in LOC. The variables sex, age, and frequency of church attendance made a small but significant contribution to the variance in LOC (1%, $p < .01$) while the interactions of sex by denomination and age by denomination contributed an additional 5.5% ($p < .01$).

Table 11
Hierarchical Regression of LOC with Possible
Moderating Variables

| Variable | R | R Square | Change in R Square |
|--------------------|-----|----------|--------------------|
| Denomination | | 15 | |
| Sex | 06 | 15 | 0056 |
| Age | -08 | 15 | 003 |
| Attendance | 06 | 15 | 004 |
| Sex x Denomination | | 17 | 02 |
| Age x Denomination | | 20 | 035 |

Note: All variables are significant $p < .01$.

Note: Decimal points omitted.

A factor analysis of the LOC scale was conducted to determine if it contained subfactors similar to those reported by past researchers and to determine if these subfactors could clarify the relationship between LOC and religion. The initial analysis indicated that 16 factors met the Kaiser criterion of having an eigenvalue greater than one (Thorndike, 1978). As the largest number of factors reported by past researchers was five (Duffy et al., 1977), and as the author had reason to suspect that the

inclusion of the God external alternative might have added still another factor, the factor analysis was repeated successively limiting the solution to 6, 5, 4, and 3 factors. Each of these four solutions was examined and those items loading greater than .40 on each of the factors were selected to represent the subfactors. The first factor remained stable for all four solutions, and both the three and four-factor solutions had a high face validity. However, the four-factor solution was chosen as the best because the three-factor solution deleted the "system modifiability" factor (Gurin et al., 1969) or the "politically responsive-unresponsive world" (Collins, 1974; Duffy et al., 1977). The items comprising the four-factor solution and the item loadings on the four factors are shown in Table 12.

A comparison of this factor analysis with those of past researchers is as shown in Table 13. Factor I of the present study consists solely of the 20 God external alternatives. Factor II contains questions 19, 23, 28, 29, 31, 37, 49, and 59, all but two of which are internal alternatives denying the importance of, or the existence of luck. The two questions (23 and 29) are external alternatives dealing with accidents as a controlling alternative, or "getting to be boss depends upon luck." This factor is almost an exact duplication of Collins' (1974) Factor III and contains all of Duffy et al.'s (1977) Factor I. It seems reasonable to accept Collins' description of this factor as the "predictable-unpredictable world" factor.

Factor III in this study was dominated by external alternatives, containing only one internal and four external alternatives describing Collins' "politically responsive-unresponsive world." Factor IV contains six internal alternatives describing the belief that the individual's

Table 12
Four-Factor Solution to LOC Scale

| Question | Factor | | | | Question | Factor | | | |
|----------|--------|-----|-----|-----|----------|--------|-----|-----|-----|
| | I | II | III | IV | | I | II | III | IV |
| 3 | 74 | -11 | -05 | -05 | 19 | -05 | 58 | -10 | 24 |
| 6 | 66 | -10 | -03 | 03 | 23 | 01 | 44 | 10 | -22 |
| 9 | 68 | 00 | 11 | -12 | 28 | 02 | 62 | -04 | 27 |
| 12 | 44 | -10 | 11 | 02 | 29 | 22 | 51 | 24 | -09 |
| 15 | 74 | 11 | 06 | -06 | 31 | 15 | 52 | -03 | 30 |
| 18 | 46 | 07 | 06 | -12 | 37 | -23 | 53 | -24 | 02 |
| 21 | 53 | 15 | 24 | -03 | 49 | -07 | 69 | -19 | 04 |
| 24 | 62 | 07 | 19 | -18 | 59 | -06 | 56 | 13 | 10 |
| 25 | 70 | 06 | 06 | 14 | 74 | 10 | -02 | 42 | 04 |
| 27 | 55 | 25 | 16 | 01 | 26 | 19 | 15 | 52 | -08 |
| 30 | 50 | 14 | 23 | 00 | 34 | 05 | -09 | 45 | 38 |
| 33 | 72 | 03 | 07 | -01 | 38 | 14 | 00 | 55 | 02 |
| 39 | 55 | 02 | 19 | -15 | 56 | 14 | -13 | 51 | 13 |
| 42 | 59 | 10 | 30 | -06 | 10 | -05 | 05 | 01 | 44 |
| 45 | 59 | -14 | 28 | 05 | 13 | 04 | 06 | 01 | 44 |
| 48 | 69 | -02 | 02 | 02 | 40 | 09 | 04 | 10 | 45 |
| 51 | 64 | 06 | -02 | 02 | 43 | 01 | 07 | -05 | 45 |
| 54 | 76 | 06 | 07 | 04 | 46 | 04 | -08 | 30 | 42 |
| 57 | 44 | 02 | 27 | -04 | 52 | -06 | 06 | -04 | 47 |
| 60 | 46 | 05 | 20 | 20 | | | | | |

Table 13
Comparison of Present Study Factor Analysis
With Previous Research Findings

| Present Study | Collins Study | Duffy et al.'s Study |
|-------------------|-------------------|----------------------|
| <u>Factor II</u> | <u>Factor III</u> | <u>Factor I</u> |
| 19 | 16 | |
| 23 | 19 | |
| 28 | 28 | |
| 29 | | |
| 31 | 31 | |
| 37 | 37 | 37 |
| 49 | 49 | 49 |
| 59 | 59 | 59 |
| <u>Factor III</u> | <u>Factor IV</u> | <u>Factor III</u> |
| 14 | 14 | 14 |
| 26 | 26 | |
| 34 | 34 | 34 |
| 38 | 38 | |
| 56 | 56 | |
| | 4 | |
| | 22 | 22 |
| | 58 | |
| <u>Factor IV</u> | <u>Factor II</u> | <u>Factor II</u> |
| 10 | 10 | |
| 13 | 13 | 13 |
| 40 | | |
| 43 | 43 | 43 |
| 46 | | |
| 52 | 52 | 52 |
| | 1 | |
| | 7 | |
| | 17 | |
| | 55 | |

rewards are obtained by being competent, and all but one of the items is couched in general terms, i.e.; "people" or "we" and is similar to Gurin et al.'s (1969) "control ideology." This study's factors did not include the "easy-difficult" world reported by Collins and Duffy et al.

It is possible that the differences in the sample populations could account for the failure to replicate this factor. Collins' population consisted of 300 college students and Duffy et al.'s consisted of 275 Army Special Forces personnel (Duffy used the same Likert scale format as Collins). Collins' population appears to be limited in age and experience while Duffy et al.'s male Army Special Forces personnel do not appear to be especially representative of the general population. The sample population in the present study are undoubtedly older than the other populations studied (the average age was 43), and had females in the sample which Duffy et al. did not. Except for the possible confounding effects of religious commitment, this study's population appears to be more representative of the general population. However, other than for this one factor, the factors in this study appear to be well supported by the findings of the other two studies as only three items, number 29 in Factor II and items 40 and 46 of Factor IV are not included in the factors reported by Collins and Duffy et al. The degree of independence between the four factors was also examined by product-moment correlation revealing that the factors had a high degree of independence except for a moderate correlation between Factors I and III (.29, $p < .001$).

The relationship between the LOC factors and religious denominations was examined by multiple-range comparison (LSDMOD) which indicated that only Factor I was significantly related to religious denominations ($p < .00001$). However, the ordering of the denominations was essentially the same as that for the total LOC scale (Table 14).

Table 14
Multiple-Range Comparison of Denominations
By LOC Factor I

| | | | | |
|---------|-----|------------------|-------------------|------------|
| Group 1 | CON | | | |
| Group 2 | | MET - EPIS - BAP | | |
| Group 3 | | | EPIS - BAP - PRES | |
| Group 4 | | | | PRES - LUT |

Note: Overall F-test ($p < .0000$).

The relationship between the LOC factors and Rokeach's values (Table 9) does provide for a clearer understanding of the relationship between LOC and the values. It appears that those who feel that God controls their lives also place a low value on an exciting life, pleasure, capable, logical, and a sense of accomplishment while they place a high value on salvation and obedience. Strangely, they also place a low value on equality.

Those who feel that their outcomes are controlled by luck, or that the world is unpredictable (Factor II), predictably place a high value on an exciting life and being imaginative, while placing a low value on capable, obedience, and salvation. Unexpectedly, they do place a high value on a sense of accomplishment which may be partially explained by Rotter's (1975) comments on "defensive externals." It is possible, that while the defensive externals value a sense of accomplishment, they use luck as an external control to explain their failure to achieve.

Those who feel that they have little influence on world affairs or the political system (Factor III) place a low value on equality, an exciting life, and a sense of accomplishment. These individuals do place a high value on salvation which appears to support Rokeach's (1969) statement that, "those who value salvation have an other-worldly orientation

Table 15
Hierachial Regression of LOC Factor I with
Possible Moderating Variables

| Variable | r | R Square | Change in R Square |
|--------------------|-----|----------|--------------------|
| Denomination | | 21 | 21 |
| Sex | -09 | 21 | 003 |
| Age | 12 | 22 | 005 |
| Sex x Denomination | | 24 | 01 |
| Age x Denomination | | 26 | 025 |

Note: All variables are significant $p < .01$

Note: Decimal points omitted.

which would appeal to those who feel powerless and that they exert little or no influence in affecting the course of political social events in their society."

The relationship of other variables to LOC Factor I was examined by hierarchical regression in the same manner as that for the total LOC scale. The results in Table 15 indicate that the religious denominations now account for 21% of the variance in LOC Factor I ($p < .01$) which is 6% more than that accounted for by denominations in the total LOC scale. As in the case of the total LOC scale, sex and age made small but significant contributions to the variance in LOC Factor I while the interactions of sex by denomination and age by denomination only accounted for an additional 3.5% of the variance ($p < .01$).

Discriminant analysis of the variables accounting for the differences in denominations. In view of the numerous significant intercorrelations between the LOC variables and the value variables (see Table 9), it seemed necessary to heed Tatsuoko's (1970) warning that the danger of getting a distorted picture of group differences tends to increase as the correlations among the variables get larger. Accordingly, a discriminant analysis was conducted to determine the differences between the denominations by submitting the four LOC factors and the values involved in the original hypotheses (a sense of accomplishment, broadminded, capable, logical, and salvation) to a step-wise discriminant analysis (Nie et al., 1975). Three discriminant functions were significant ($p < .05$) which, using Tatsuoka's (1970) formula for determining the multivariate omega squared, indicated that approximately 39% of the total variability in the discriminant functions was attributable to denominational differences. The nature of the three functions can be determined by an examination of the standardized

discriminant function coefficients in Table 16. Only two of the LOC factors, Factors I and IV, were included in the significant discriminant functions, and while the weights of Factor I remained above .50 in all three discriminant functions, Factor IV only attained a maximum weight of -.31 in the second function indicating that Factor IV (control ideology) does not make a large contribution to the differences between the denominations.

Discriminant function 1, accounting for 61% of the explained variance between the denominations, was about equally dominated by salvation and LOC Factor I with weights of .60 and .50 respectively. Discriminant function 2, accounting for 26% of the explained variance, is dominated by LOC Factor I with a weight of -.82 and some discrimination is added by the values broadminded (-.49) and salvation (.41). Discriminant function 3 which only accounts for 7% of the explained variance, is dominated by the values salvation (-.85) and broadminded (-.84).

Table 16

Standardized Discriminant Function Coefficients for
the LOC Factors and Rokeach's Values

| | Function 1 | Function 2 | Function 3 |
|---------------------|------------|------------|------------|
| LOC Factor I | 50 | -82 | 46 |
| LOC Factor IV | -12 | -31 | -06 |
| Broadminded | -22 | -49 | -84 |
| Capable | 02 | 02 | -03 |
| Salvation | 60 | 41 | -85 |
| Percent of Variance | 61 | 26 | 7 |

Note: Decimal points omitted.

Table 17
Denominational Centroids Based on Discriminant Functions

| Group | Function 1 | Function 2 | Function 3 |
|----------------|------------|------------|------------|
| Baptist | .34 | -.82 | .15 |
| Congregational | -1.82 | .03 | .37 |
| Episcopal | -.11 | -.25 | -.33 |
| Lutheran | .69 | -.26 | .26 |
| Methodist | -.03 | .37 | -.08 |
| Presbyterian | -.10 | -.67 | .04 |

Figure 1 contains the plots of the group centroids of each denomination using coordinates obtained by combining discriminant functions 1 and 2, 1 and 3, and 2 and 3. Remembering that function 1 is a salvation-LOC dimension, and that function 2 is primarily a LOC function, and that function 3 is primarily a values function, looking at the figure reveals that quadrant I may be designated as the high salvation-low LOC quadrant. Those denominations falling in that quadrant are characterized by placing a high value on salvation, and being internal on the LOC dimension. Quadrant II is characterized by low LOC scores and low salvation scores. Quadrant II is characterized by containing those denominations with high LOC scores (externals) who place a low value on salvation. Quadrant IV is characterized by those who place a high value on salvation and are external.

From the plots of the centroids on functions 1 and 2, it can be seen that the Baptists and the Presbyterians are the most unlike on those dimensions in that the Baptists are more internal and place a higher value on salvation than the Presbyterians. Using the Baptist centroid as a reference, it can be seen that they are most like the Methodists followed by the Lutherans and the Episcopalians.

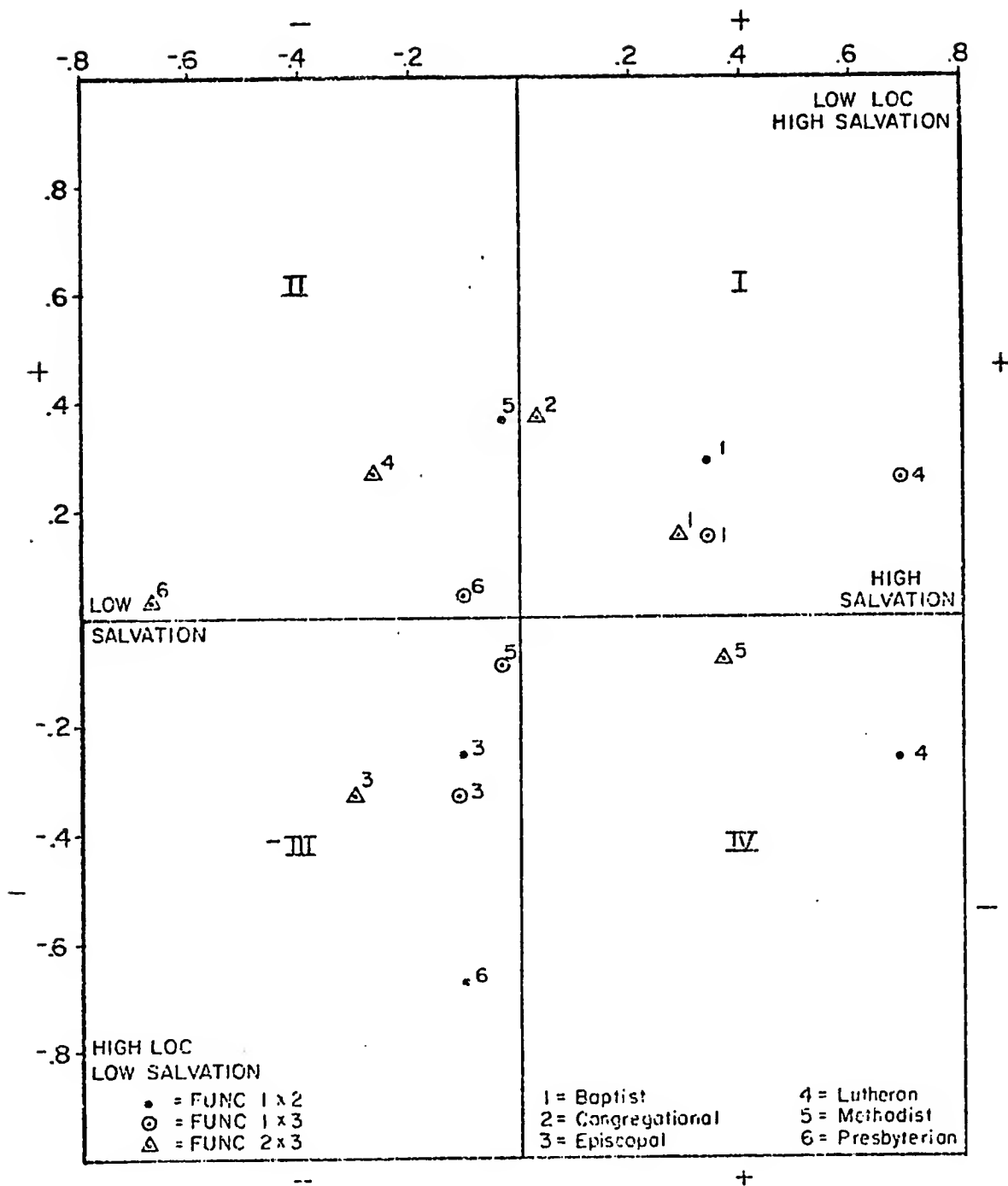


Figure 2. Plot of Denominational Group Centroids.

When the centroids are plotted using functions 1 and 3, it is possible to discern the similarities and dissimilarities when LOC is deemphasized and the values salvation and broadminded are emphasized. Now, the Baptist are most unlike the Episcopalians with the Baptists placing a relatively lower value on salvation and broadminded than the Episcopalians. The Baptists are almost equidistant from the other denominations, but slightly closer, or more similar to the Lutherans. It is important to note that all the centroids are now much closer together confirming the previous findings that the differences between the denominations is greater for the LOC dimension than for the values dimensions.

When the centroids are plotted utilizing functions 2 and 3 which again emphasize LOC Factor I and the values, the large difference between the Baptists and the Presbyterians reappears and the Baptists again become most like the Methodists and the Congregationalists, and least like the Presbyterians and Episcopalians. It thus becomes evident that the LOC Factor I dimension best discriminates between the denominations. However, examination of the "confusion matrix" (Table 18) which permits a comparison between the probability of correctly predicting group membership with the discriminant function versus the probability of correctly predicting group membership by chance based upon size, indicates that the discriminant functions do not predict any better than chance on some denominations, for example, the discriminant functions only correctly classified 7% of the Baptists as belonging to the Baptist denomination versus an expectation of correctly classifying 17% correctly by chance based upon group size. Similarly, the discriminant functions accurately predicted group membership for the Episcopalians with a 19% accuracy

while a chance prediction based upon group size would predict with an 18% accuracy. However, the discriminant functions do classify the remaining four denominations better than chance.

Table 18
Confusion Matrix Comparison of Accuracy of Discriminant
Function With Prediction by Chance

| Actual Group | N | Predicted Group Membership | | | | | | Chance |
|--------------|----|----------------------------|----|----|----|----|----|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | |
| 1 | 41 | 7 | 2 | 5 | 12 | 66 | 7 | 17 |
| 2 | 14 | 0 | 64 | 7 | 0 | 29 | 0 | 06 |
| 3 | 43 | 5 | 2 | 19 | 7 | 51 | 16 | 18 |
| 4 | 32 | 6 | 3 | 3 | 31 | 47 | 9 | 13 |
| 5 | 79 | 6 | 3 | 5 | 4 | 81 | 1 | 33 |
| 6 | 33 | 12 | 9 | 12 | 18 | 18 | 30 | 14 |

Note: Decimal points omitted. Predicted group membership by percent.

In summary, with the exception of the Baptists and the Episcopalians, the discriminant functions do classify subjects correctly by denominations better than chance with the major discriminating variables being LOC Factor I. When the denominations are classified by values as in functions 1 and 3, the centroids of the denominations become much closer together. The values contributing the most to the discriminant functions are salvation, and broadminded.

LOC and Leadership

This subsection deals with the investigation of the relationship between: 1) The follower's LOC and his perceptions of the leader's behavior, 2) the leader's LOC and his perceptions of his own behavior, 3) the follower's and the leader's LOC and the follower's perceptions of the leader's behavior, and 4) the relationship between the follower's LOC and the leader's perceptions of his own behavior. The appropriate model for

analysis will be discussed, and then the above relationships will be examined first through zero-order correlation, and then by multiple regression using total scale scores and factor scores for each of the three dimensions LOC consideration and structure.

The Model

Dansereau and Dumas (1976) maintain that much of the conflicting and inconsistent findings reported in past leadership studies may be due to faulty assumptions as to the basic nature of leader behavior and the follower's perceptions of that behavior. From this author's interpretation of Dansereau and Dumas' paper, it appears that three basic assumptions variously made by past researchers are: 1) that leaders behave homogeneously towards subordinates regardless of the effects of the organizational setting, or the behavior of the subordinates. 2) That leader behavior is affected by the organizational setting and the behavior of the subordinates as a group, but the leader behaves homogeneously towards subordinates within the group, or 3) that leaders behave in a heterogeneous manner towards individual subordinates in the unit.

Dansereau and Dumas maintain that past researchers have often measured leadership variables at one level of analysis and drawn conclusions based upon assumptions which apply at another level.

In reviewing the past literature, it appears that this may well be the case. For example, Durand and Nord (1976) assumed that leader behavior was heterogeneous and conducted their analysis at the dyadic level by measuring the relationships between the leaders and the followers within one organization. This analysis disregarded any possible effects of the organizational setting on the leader-follower relationship. In his subsequent research, which entailed more than one organization,

Nord (Note 1) found that the signs of the relationships between the LOC factors and consideration and structure differed between organizations. It is possible, that while the leader-follower interactions may result in heterogeneous leader behavior, still other factors at the organizational level are operating to cause a certain amount of homogeneity in the leader's behavior.

Similarly, Evan's (1974) analysis appears to have been based upon assumptions that leader behavior is homogeneous in that he conducted his analysis of the relationship between LOC and leader behavior by averaging responses across units, thus ignoring the possible effects of the organization and the leader-follower interactions on leader behavior. Goodstadt and Hjelle (1973) based their analysis on the dyadic relationship, but drew their conclusions based upon the assumption that leader behavior was homogeneous. Pryer and Distefano (1972) apparently assumed that leader behavior was homogeneous within the organization as their analysis was based upon three organizational levels within a hospital. Unfortunately, they did not specify how many leaders were being described by the followers at each of the three levels. It is possible that at one level, the findings were based upon group-level data, while at another level, the data may have been based upon the dyadic relationship.

Referring to Table 3, it can be seen that Durand and Nord's findings based upon a dyadic analysis have been compared with Evan's data based upon an analysis which did not take into account the possible effects of the organization, or the leader-follower interactions on the relationship between LOC and leader behavior, and Pryer and Distefano's findings which

¹Nord, W. Personal communication, September 18, 1978.

considered only the effects of the organization (and possibly, the leader-follower interaction) on the relationship, all of which may account for the conflicting findings.

The analyses in the present study were based upon Dansereau and Dumas' (1976) recommendations which are as follows: 1) the first, or broadest level of analysis was conducted by computing zero-order correlations between the variables using the difference between the individual scores and the grand mean. If significant correlations between LOC and leader behavior were found, it might be assumed that some general relationship existed which was not affected by the organizational setting or the leader-follower interaction. 2) The next step in the analysis was to examine the relationships between the variables utilizing the differences between the mean of each group and the mean of the group means as the basis for the analysis. If significant correlations were found at this level where none were found at the previous level of analysis, it would appear to indicate that factors related to the organizational setting, or to the collective influence of the followers might be responsible for the LOC-leader behavior relationship. 3) The last level of analysis was conducted utilizing the differences between the individual follower's score and the group mean score as the basis of analysis. Significant relationships at this level of analysis would appear to indicate that the leader's behavior was heterogeneous in regards to the subordinates. It is, of course, possible that significant relationships might be found at all three levels of analysis indicating that, while leader behavior tends to be homogeneous, factors in the organizational setting and/or the leader-follower interactions cause the leader to behave (or be perceived by the followers to behave) in a heterogeneous manner.

It might be possible for example that external leaders would tend to behave in the same manner based upon their LOC. However, constraints or other factors operating at the organizational or dyadic level, may result in heterogeneous behavior towards the group as a whole, or towards subordinates on a dyadic leader-follower basis. For ease of discussion, the above steps in the analysis will be referred to in the remainder of this study as level one, level two, and level three.

The relationship between the follower's total LOC scale score and consideration and structure was examined using the above method. The correlations between the total LOC scores and consideration and structure at level one were not significant. However, consideration and structure were moderately and significantly correlated ($r = .49$, $p < .001$). This is similar to the findings of other researchers who report moderate to high correlations between the two scales (Kerr, Schriesheim, Murphy, & Stogdill, 1974; Schriesheim, House, & Kerr, 1976).

The relationship between LOC and the two scales was then examined at level two (the group level) with the finding that while LOC's relationship approached significance with structure ($r = .41$, $p < .095$), there was no significant relationship between LOC and consideration. Similarly, no significant relationships were found between the scales at level three (the individual differences level). Hypotheses six and seven were not supported by these analyses.

The Relationship Between the Follower's Four LOC Factors and Consideration and Structure

A product-moment correlation of the four LOC factors with the consideration and structure scales at level one indicated that no significant relationships existed between the four LOC factors and the consideration

and structure scales. At level two (the group level), a significant relationship was found between LOC Factor II (luck external) and structure ($r = -.62, p < .03$). In this sample population, there appears to be a general tendency for those who feel that their outcomes are controlled by luck to perceive their leaders as less structuring than those followers who feel that their outcomes are not controlled by luck.

Table 19

The Relationship Between the Follower's LOC Factors and
Consideration/Structure at the Individual
Differences Level (Level Three)

| LOC Factors | Consideration | | | | Structure | | | |
|-------------|---------------|------|-----|-----|-----------|------|------|--------|
| | I | II | III | IV | I | II | III | IV |
| Groups | | | | | | | | |
| 11 | | | | | | | -40* | |
| 31 | | -38* | | 35* | | | | |
| 42 | 84* | | | | | -84* | | |
| 51 | | | | | | | | 26* |
| 61 | | | | | | | | -71*** |

* $p < .05$

** $p < .01$

*** $p < .001$

Note: Decimal points omitted

Moving to level three (the individual differences level), significant relationships were found in five of the twelve groups as indicated in Table 19. The pattern of these relationships, and the fact that they existed in only five of the twelve groups, appears to indicate that either: 1) that leaders behave in a heterogeneous manner towards their subordinates, 2) that the existence of other factors operating within

the group interact with the dyadic relationship to produce individual differences in the follower's perceptions of the leader's behavior, or 3) that because of the large number of relationships examined, the significant relationships occurred by chance.

Factor Analysis of Consideration and Structure Scales

As it was possible that the consideration and structure scales might contain subfactors which are differentially related to the LOC subfactors and thus mask or confound the relationship, a factor analysis of the consideration and structure scales was conducted. Both the scales were combined and factor analyzed by varimax rotation. The solution identified four factors having an eigenvalue greater than one, and accounting for 62% of the variance (Table 20). Further each of the first two factors contained a mixture of consideration and structure items indicating, that for this sample population, the use of the original classification of the individual scales into consideration and structure scales was inappropriate. Factor IV contained two items with loadings on that factor of .49 and .52, but these items also had high factor loadings on Factor I of .65 and .70 indicating a degree of redundancy between Factors I and IV. Because of this redundancy, it appeared that a three-factor solution might be more parsimonious.

The three-factor varimax solution provided the factors as shown in Table 21. This solution appears to be clearer and more parsimonious in that the two items loading on Factor IV in the principle components solution moved to Factor I with loadings of .71 and .76. Factor I contains four consideration and three structure items. Factor III contains seven of the original structure items and one consideration item (item C3 was eliminated because of its nearly equal loadings on Factors III and IV).

Table 20
Four-Factor Principle Component Solution for Combined
Scales and Consideration and Structure

| Factors | I | II | III | IV |
|------------------------|----|----|-----|----|
| Item | | | | |
| C7 | 82 | | | |
| C8 | 78 | | | |
| C9 | 65 | | | 49 |
| S8 | 76 | | | |
| S9 | 85 | | | |
| S10 | 59 | | | |
| C10 | 70 | | | 52 |
| C3 | | 51 | | |
| C5 | | 56 | | |
| S1 | | 46 | | |
| S2 | | 49 | | |
| S3 | | 55 | | |
| S4 | | 50 | | |
| S5 | | 48 | | |
| S6 | | 56 | | |
| S7 | | 56 | | |
| C1 | | | 70 | |
| C2 | | | 72 | |
| C4 | | | 76 | |
| C6 | | | 50 | |
| Percent of Variance | 45 | 17 | 10 | 8 |

Note: Decimal points omitted.

Table 21
Three-Factor Solution for Combined Scales of
Consideration and Structure

| Factors | I | II | III | IV |
|------------------------|----|----|-----|----|
| Item | | | | |
| C7 | 81 | | | |
| C8 | 81 | | | |
| C9 | 71 | | | |
| C10 | 76 | | | |
| S8 | 70 | | | |
| S9 | 85 | | | |
| S10 | 57 | | | |
| C1 | | 67 | | |
| C2 | | 68 | | |
| C3 | | 43 | 46 | |
| C4 | | 74 | | |
| C6 | | 53 | | |
| C5 | | | 52 | |
| S1 | | | 46 | |
| S2 | | | 49 | |
| S3 | | | 54 | |
| S4 | | | 49 | |
| S5 | | | 50 | |
| S6 | | | 57 | |
| S7 | | | 55 | |
| Percent of Variance | 63 | 21 | 16 | |

Note: Decimal points omitted.

Factor I is difficult to assess because of the nature of the items comprising the factor. Factor III, containing only one item from the consideration scale, may logically be called the "structure factor," and Factor II appears to consist of items that emphasize the interpersonal relationships dimension of the consideration scale. There is also a moderate correlation between the three subscales (Table 22), but the correlations are not as high as that between the original consideration and structure scales (that R was .49).

Table 22
Correlations Between Follower LBDQ Factors

| Factor | 1 | 2 | 3 |
|--------|-------|-------|--------|
| 1 | | .34** | .37** |
| 2 | .34** | | .43*** |
| 3 | | | |

** $p < .01$

*** $p < .001$

Note: Decimal points omitted.

The Relationship Between the Follower's LOC and LBDQ Factors

The analysis of the relationship between the four LOC factors and the three LBDQ factors at level one found that LOC Factor II (luck external) was significantly and negatively related to LBDQ Factor III (structure) ($r = -.14$, $p < .05$). At level two (group level), LOC Factor II (luck external) was found to be negatively and significantly correlated with LBDQ Factor I (mixed consideration and structure) ($r = -.53$, $p < .038$), and with LBDQ Factor III (structure) ($r = -.57$, $p < .027$). At the individual differences level (level three), significant relationships were found in five of the twelve groups. Four of the five groups were the

Table 23

The Relationship Between the Follower's LOC and
LBDQ Factors at Two Levels

| LOC Factors | | LBDQ Factors | | |
|--|-----|--------------|------|-------|
| | | I | II | III |
| At the Group Level Three | | | | |
| | I | | | |
| | II | -54* | | -57* |
| | III | | | |
| | IV | | | |
| At the Individual Differences Level | | | | |
| Group 11 | I | | -35* | |
| | II | | | |
| | III | | | -49* |
| | IV | | | |
| Group 12 | I | | | 72* |
| | II | | 75* | |
| | III | | | |
| | IV | | | |
| Group 31 | I | | | |
| | II | | -40* | |
| | III | | | |
| | IV | | 38* | |
| Group 42 | I | | | 85* |
| | II | | | |
| | III | | | |
| | IV | | | |
| Group 61 | I | | | |
| | II | | | |
| | III | | | |
| | IV | 61** | -53* | -65** |

* $p < .05$

** $p < .01$

Note: Decimal points omitted

same groups in which significant relationships were found in the previous analysis. The findings at this level lead to the same alternative conclusions as in the previous analysis: 1) that leaders behave in a heterogeneous manner towards their subordinates, 2) that the existence of other factors operating within the group interacts with the dyadic relationship to produce individual differences in the follower's perceptions of the leader's behavior, or 3) because of the large number of relationships examined, the significant relationships occurred by chance (see Table 23).

Table 24 presents the relationship between the LOC and LBDQ factors from a different perspective. In this table it can be seen that only LOC Factor II has a significant (negative) relationship at the group level of analysis. However, at the individual differences level, only two significant relationships were found between LOC Factor II and the LBDQ factors (one positive and one negative). LOC Factor I had no significant relationships with the LBDQ factors at the group level, but significant relationships were found within the groups for LBDQ Factors II and III. Here again, the direction of the relationships were not consistent. LOC Factor IV similarly had no significant relationships with the LBDQ Factors at level two (group level), but had significant relationships with the LBDQ factors at the individual differences level and again, the direction of the relationships were inconsistent.

From these findings, it appears that: 1) there is a general tendency for luck external followers to perceive their leaders as less structuring than do luck internal followers. Further this same relationship becomes stronger when measured at the group differences level and becomes inconsistent at the dyadic level in that significant relationships were only found in two of the twelve groups and the direction of the

relationship differed between the two groups, and 2) luck external followers tend to perceive their leaders as exhibiting less of the mixed consideration and structure behavior than do luck internal followers. As no significant relationship was found between these two factors at level one, it would appear that variables operating at the group, or at the dyadic level would be operating to form this relationship. As no significant relationships were found at the dyadic level, it seems logical to argue that characteristics within the leader, or follower, and variables at the organizational level are combining to produce homogeneous perceptions of the leader's behavior by the followers.

Table 24
Relationship Between the Follower's LOC and
LBDQ Factors at Two Levels

| LOC Factors | LBDQ Factors by Level Three | | | | | |
|----------------|-----------------------------|-------------|----|-----|---|-------------|
| | I | II Level | II | III | I | II Level |
| I | | | | | | ++ |
| II | - | | | - | | +- |
| III | | | | | | |
| IV | | | | | + | +- |

Note: At the (Level Three) level, the signs indicate the direction of each significant relationship found within a group.

The Relationship of Tenure to the LBDQ Factors

Tenure was entered as a predictor variable into a series of multiple regression equations with the differences between the leader's and the follower's scores on each of the three LBDQ factors serving as the criterion variable. The findings were that tenure accounted for small, but significant amounts of variance in the cases of LBDQ Factors I and II

($r = .005$, $p < .01$), and ($r = .007$, $p < .05$). An examination of the simple correlations indicated that, as tenure increases, the followers tend to perceive their leaders as exhibiting more mixed consideration-structuring behaviors, and to be more interpersonally involved. While the amount of variance accounted for by the effects of tenure were small, the analyses supported hypothesis eight.

The Relationship Between LOC and the Leader's Perceptions of His Own Behavior

Because of the finding that the consideration and structure scales were comprised of three factors, the relationship between the leader's LOC factors and each of the original consideration and structure scales was not examined. A product-moment correlation of the four LOC factors with the three LBDQ factors indicated that LOC Factor II (luck external) correlated significantly with LBDQ Factor II (interpersonal relations) ($r = -.46$, $p < .02$), and with LBDQ Factor III (structure) ($r = -.57$, $p < .005$).

These findings provide partial support for hypothesis number five in so far as LBDQ Factor II can be assumed similar to consideration, and LBDQ Factor III can be assumed to resemble structure. The findings indicate that internal leaders perceive themselves to be more structuring and more interpersonally involved than do external leaders.

Leader's Behavior and the Leader's Description of His Own Behavior

The degree of agreement between the follower's perceptions of the leader's behavior and the leader's description of his own behavior was examined by correlating the differences between the follower's group mean scores and the mean of the groups scores with the difference between the leader's score and the mean of the leaders' scores. No significant

relationships were found indicating that there is no relationship between how the leader thinks he behaves towards the group and the followers' perceptions of their leader's behavior.

Regression Analysis of the Relationship Between LOC and Leadership

As the most consistent relationships between the LOC and LBDQ were found at the group level, it appeared appropriate to move from an examination of the zero-order correlations between the LOC and LBDQ factors to a regression analysis at the group level. The following are the findings which resulted from entering the follower's LOC and LBDQ factors measured as the differences between the group means and the mean of the group means and the leader's LOC and LBDQ factors measured as the difference between the individual leader's scores and the mean of the scores for the leaders on each of the variables. In all the following analyses the stepwise regression method was utilized in which the computer chose the most appropriate variable to enter into the equation at each step (Nie et al., 1975).

The first analysis used the follower's LBDQ factors as the criterion variables and the leader and follower's LOC factors as the predictor variables in order to determine which of the LOC factors best predicted the follower's perceptions of the leader's behavior. The results of the first regression analysis with LBDQ Factor I as the criterion variable are as shown in Table 25. The follower's LOC Factor I was the first variable selected, and while the relationship between LOC Factor I and LBDQ Factor I was not significant by itself, the inclusion of the leader's LOC Factor IV in the equation produced an equation which accounted for 56% of the variance in the follower's perception of the leader's behavior as measured by LBDQ Factor I ($p < .05$). The third variable to enter the equation was the leader's LOC Factor II which accounted for an additional

20% of the variance ($p < .01$). The leader's LOC Factor I accounted for an additional 9% of the variance ($p < .01$), and the follower's LOC Factor I plus the leader's LOC Factor III accounted for an additional 1% of the variance ($p < .05$). Thus, a combination of the leader and follower's LOC factors accounted for 86% of the variance in the follower's perceptions of the leader's behavior as measured by LBDQ Factor I.

Table 25

Correlation Coefficients of Supervisor and Follower LOC
Factors With the Follower's Perceptions of the
Leader's Behavior

| Criterion Variable: LBDQ Factor I | | | |
|------------------------------------|------------------|--------------------|----------|
| Predictor Variables | R Square | Change in R Square | Simple R |
| Follower LOC Factor II | 28 ^{ns} | 28 | -.53 |
| Leader LOC Factor IV | 56* | 28 | .44 |
| Leader LOC Factor II | 76** | 20 | -.18 |
| Leader LOC Factor I | 85** | 09 | .12 |
| Follower LOC Factor I | 86* | 01 | -.08 |
| Leader LOC Factor III | 86* | | .26 |
| Criterion Variable: LBDQ Factor II | | | |
| Predictor Variables | R Square | Change in R Square | Simple R |
| Leader LOC Factor II | 56** | 56 | -.75 |
| Leader LOC Factor III | 61* | 05 | -.22 |
| Follower LOC Factor III | 67* | 06 | -.15 |

* $p < .05$

** $p < .01$

Note: Decimal points omitted.

An examination of the simple correlations indicated a case of "net suppression" (Cohen & Cohen, 1975) in the case of the follower's LOC Factor II and the leader's LOC Factor IV. The simple correlation between the follower's LOC Factor II and LBDQ Factor I was $-.53$ and that of the leader's LOC Factor IV with LBDQ Factor I was $.44$. Each of the variables accounted for 28% of the variance in the leader's behavior as perceived

by the follower's on the dimension of LBDQ Factor I. Followers who believe that luck controls their lives tend to perceive their leaders as exhibiting less of the mixed consideration-structure behavior than do followers who do not believe that luck controls their lives. However, this effect appears to be offset by the indications that leaders who feel that competency will not gain the rewards (competency externals), tend to be perceived by their followers as exhibiting more of the mixed consideration-structure behavior than leaders who are competency internals.

This same regression analysis indicates that leaders who are luck externals tend to be perceived as exhibiting less of the mixed consideration-structure behavior than leaders who are luck internals and leaders who are God externals tend to be perceived as exhibiting more of the mixed consideration-structure behavior than leaders who are God internals. As indicated in the table, the follower's LOC Factor I and the leader's LOC Factor II made a minimal, but significant contribution to the prediction of the follower's perceptions of their leader's behavior as measured by LBDQ Factor I.

The results of the analysis using the follower's LBDQ Factor II are as indicated in Table 25. The first predictor variable to enter the equation was the leader's LOC Factor II (luck external) which accounted for 56% ($p < .01$) of the variance in the leader's behavior on the LBDQ Factor II (interpersonal relations) as perceived by the followers. The leader's LOC Factor III (system external) accounted for an additional 5% of the variance ($p < .05$), and the follower's LOC Factor III for 6%. The leader's two LOC factors plus the follower's LOC Factor III thus accounted for 67% of the variance in the leader's behavior as measured by LBDQ Factor II as perceived by the followers.

An examination of the simple correlations between the predictor and criterion variables indicates that: 1) leaders who are luck externals tend to be perceived by their followers as less interpersonally involved with their subordinates than are luck internal leaders. 2) Leaders who are system externals tend to be perceived by their followers as less interpersonally involved than are system internal leaders, and 3) similarly, system external followers tend to perceive their leaders as less interpersonally involved than do system internal followers.

The leader's perceptions of his own leadership behavior was examined in the same manner as in the previous analysis with the leader's self-reported behavior as measured by the three LBDQ factors serving as the criterion variables and his LOC factors serving as the predictor variables. The results in Table 26 appear to indicate that: 1) the leader's self-reported behavior on the LBDQ Factor I and II dimensions were not significantly related to his LOC factors, 2) 61% of the variance in the leader's self-reported behavior on LBDQ Factor III was accounted for by his LOC Factor IV ($p < .01$), an additional 4% of the variance was accounted for by his LOC Factor II ($p < .01$), and a small, but significant amount of variance was accounted for by his LOC Factor I.

Table 26

Correlation Coefficients of Leader LOC With His
Perceptions of His Own Behavior

| Criterion Variable: LBDQ Factor III | | | |
|-------------------------------------|----------|--------------------|----------|
| Predictor Variables | R Square | Change in R Square | Simple R |
| Leader LOC Factor IV | 61** | 61 | -.78 |
| Leader LOC Factor II | 64** | 03 | -.47 |
| Leader LOC Factor I | 65* | 01 | -.17 |

* $p < .05$

** $p < .01$

Note: Decimal points omitted.

An examination of the simple correlations appears to indicate that:

- 1) competency external leaders (LOC Factor IV) tend to perceive themselves as less structuring than do leaders who are competency internals, and 2) luck external leaders (LOC Factor II) tend to perceive themselves as less structuring than do leaders who are luck internals.

The relationship between the leader's perceptions of his own behavior and the LOC of his followers was also examined in a similar manner with the leader's self-reported behavior on the three LBDQ dimensions serving as the criterion variables and the follower's LOC factors serving as predictor variables. The results in Table 27 appear to indicate that:

- 1) a combination of the follower's LOC Factors I and III account for 52% of the variance ($p < .05$) in the leader's self-reported behavior as measured by LBDQ Factor I, 2) the follower's LOC did not significantly predict the leader's self-reported behavior as measured by LBDQ Factor II (interpersonal relations), and 3) the follower's LOC Factor IV (competency external) accounted for 52% of the variance ($p < .01$) in the leader's self-reported behavior as measured by LBDQ Factor III (structure), LOC Factor I (God external) accounted for an additional 14% ($p < .01$), and the follower's LOC Factor III (system external) for still another 4% ($p < .05$).

An examination of the simple correlations appears to indicate that:

- 1) leaders whose followers are God externals, or system externals, tend to describe themselves as exhibiting more mixed consideration-structure behavior (LBDQ Factor I) and more structuring behavior (LBDQ Factor III) than do leaders whose followers are God or system externals, and 2) leaders whose followers are competency externals tend to describe themselves as less structuring than do leaders whose followers are competency internals.

Table 27

Correlation Coefficients of Follower LOC With the
Leader's Perceptions of His Own Behavior

Criterion Variable: LBDQ Factor I

| Predictor Variables | R Square | Change in R Square | Simple R |
|-------------------------|------------------|--------------------|----------|
| Follower LOC Factor I | 31 ^{ns} | 31 | 55 |
| Follower LOC Factor III | 52* | 21 | 03 |

Criterion Variable: LBDQ Factor III

| Predictor Variables | R Square | Change in R Square | Simple R |
|-------------------------|----------|--------------------|----------|
| Follower LOC Factor IV | 52** | 52 | -72 |
| Follower LOC Factor I | 66** | 14 | 64 |
| Follower LOC Factor III | 72** | 06 | 13 |

* $p < .05$

** $p < .01$

Note: Decimal points omitted.

SECTION V
DISCUSSION
LOC and Religion

Summary of Findings

In summary, an examination of the relationship between LOC and religion found:

1. That the six Protestant denominations differed significantly on the LOC dimension, and that the "God external" subfactor accounted for this difference.

2. While the denominations differed significantly on the LOC dimension the ordering of the denominations was not as predicted by hypothesis number one.

3. As predicted by hypothesis number two, externals were found to place a higher degree of importance on the value salvation and lower degree of importance on the values of a sense of accomplishment and capable than did internals, but contrary to the prediction, no significant relationship was found to exist between LOC and the values broadminded and logical.

4. While hypothesis four, predicting a significant difference between the denominations on the importance of salvation, was supported, the only significant difference existed between the Congregationalists and the rest of the denominations.

5. The factor analysis of the LOC scale produced a factor structure very similar to that found by Collins (1974) and Duffy et al. (1977).

6. Demographic variables sex and age made only small, but significant contributions to the variance in LOC.

7. Discriminant analysis indicated that LOC Factor I accounted for most of the differences between the denominations, and that there was very little difference between the denominations on the values.

Discussion of the Findings

The use of the modified LOC scale which added the concept of God as an additional form of external control, did discriminate significantly between the six major Protestant denominations while the use of the unmodified scale did not. This finding appears to support the contentions of Glock and Stark (1966), and Poppleton and Pilkington (1963) that Protestant denominations differ among themselves on important dimensions, and that to lump the Protestant denominations together as has been done in some past research, is inappropriate.

Further, the results of this study appear to support Benson and Spilka's (1973) contention that the Rotter scale may not tap the full dimensions of the LOC construct in that individuals who are external, in that they feel that God controls their lives, would not be identified by their responses to the Rotter scale. In the Rotter scale, subjects are only provided with a choice between luck, chance, and powerful others as external controls over their outcomes. This contention appears to be further supported by the finding that the LOC scale used in this study correlated only moderately ($r = .56$, $p < .001$) with Rotter's scale indicating the possibility that the new scale added an additional dimension to the LOC construct. The failure of the Rotter scale to tap the full dimensions of LOC by including the concept of God as an external alternative may also explain why the efforts of past researchers (using

Rotter's scale) failed to find differences between the religious denominations on the LOC dimension.

Several factors involved in this study may contribute to an explanation for the failure to predict the ordering of the denominations on the LOC dimension. First, the sample population was skewed in the direction of frequent church attendance as evidenced by the fact that 90% of the sample reported attending church, and/or Sunday School more than once a week. Further, the members of all the denominations except the Congregationalists placed an equal value on the variable salvation. Rokeach (1969) reported that many of the value differences between the denominations disappeared for those subjects who attended church frequently, and that the importance of the values examined by hypothesis number one decreased linearly with a decrease in frequency of church attendance.

A replication of Rokeach's findings was attempted by dividing the present sample population into two groups, those attending church, and/or Sunday School once a week or more, and those attending less frequently than once a week. The N of the former group was 217 and that of the latter group was 24. T-tests for significant differences between these two groups on the four LOC factors and the values contained in the values scale revealed significant differences only on the values sense of accomplishment ($p < .04$), imaginative ($p < .01$), and pleasure ($p < .01$), all of which were more important to those who attended church and/or Sunday School less frequently. Therefore, the unexpectedly high frequency of church and/or Sunday School attendance appears to have dampened or diminished the denominational differences on the values dimensions whose hypothesized relationships with LOC were used as a basis for the predictions of denominational differences.

It is also possible that administering the questionnaires through the church organizations caused the subjects to bias their responses reflecting their denominational theology rather than values. If this is the case, the ordering of the denominations in Table 12 may be explained by the differences in the denominational theology rather than by the hypothesized relationship between the values and LOC. The overlapping groupings of the denominations in this study ranging from the most internal to the most external on the LOC dimension were Congregational, Methodist, Episcopalian, Baptist, Presbyterian, and Lutheran. The Lutherans and Presbyterians were on the external end of the continuum because their doctrine emphasizes that God is all powerful and predestines, or controls, individual destinies (Calvinist doctrine). Further, salvation is a free gift to Grace which is given, or denied, individuals for reasons known only to God. All that man can do to achieve his rewards is to have faith.

Moving towards the internal end of the continuum, the Baptist doctrine explains that, while salvation is a free gift of God, man must do his part by actively accepting the gift and turning towards obedience and repentance. The Episcopalians accept basically the same doctrine as the Baptists except that there is not quite the same emphasis on individual responsibility. Rather it is a group responsibility to accept the free gift of salvation and its attendant obligations. This emphasis on the two-way covenant gradually reduces as one proceeds from the Episcopalians through the Methodists to the Congregationalists who deemphasize the value of salvation and the controlling influence of God, and increase the emphasis on the humanistic and ethical aspects of Christianity. This

explanation (Note 2) is consistent with the findings of this study that the ordering of the denominations on the LOC dimension from the most internal to the most external was Congregational, Methodist, Baptist, Episcopalian, Lutheran, and Presbyterian.

From the results of this study, it appears that there is a moderate, significant relationship between religion and LOC. However, this study had access to a limited population sample and the findings may have been confounded by regional culture. Sims and Baumann (1972) found evidence to suggest that Southerners believe that God controls their lives more than do Northerners. Still unanswered is the question of whether religious socialization may be an antecedent of the LOC personality trait, or whether individuals tend to seek a religion which meets the needs formed by their personalities.

The next step in the examination of the relationship between LOC and Religion should be to expand the sample population to include a population which will include more possible regional cultural differences. The involvement of theologians will also be necessary for a more detailed, and in-depth analysis of the implications of the relationship between LOC and Religion.

From the standpoint of generalized research into LOC, it appears that more attention will have to be given to the construct. While there is some general agreement as to the nature of the LOC factors, these factors are not stable and may vary from one sample population to another. As the

²The author is indebted to Dr. Hill of the Religion Department, University of Florida, for his personal communication explaining the findings discussed above, September 21, 1978.

composition of these factors varies, it would seem to be important to determine the specific factor structure for each population under study. While larger sample sizes are required to support a factor analysis, to assume that a particular factor structure exists without testing that structure does not appear to be tenable. Further, the use of the total scale appears to mask important relationships as was demonstrated in this study.

LOC and Leadership

Summary of the Findings

An examination of the relationship between LOC and the follower's perceptions of the leader's behavior, and LOC and the leader's perceptions of his own behavior found:

1. No significant relationship between the three scales LOC, consideration, and structure at any of the three levels of analysis. Therefore hypothesis six and seven were not supported.

2. A significant relationship between LOC Factor II (luck external) and structure ($r = -.62$, $p < .03$) at the group level of analysis (level two). Also, at the individual differences level (level three), significant correlations were found between the LOC factors and consideration and structure in five of the twelve groups. However, the relationships at this level were inconsistent across the groups. For example, LOC Factor I correlated positively with consideration in one group, but no other significant relationships between LOC Factor I and either consideration or structure were found in any of the other groups (see Table 19).

3. A factor analysis of the combined consideration and structure scales resulted in three factors, two of which contained items from both of the scales indicating that the use of the consideration and structure

scales as entities were not appropriate for analysis of this sample population.

4. An analysis of the relationship between the four LOC factors and the three LBDQ factors at the three levels of analysis revealed that:

a. At level one, LOC Factor II (luck external) was negatively and significantly correlated with LBDQ Factor III (structure).

b. At level two (group level), the follower's LOC Factor II (luck external) correlated negatively with LBDQ Factor I (mixed consideration-structure), and negatively with LBDQ Factor III (structure).

c. At the individual differences level (level three), the same inconsistent pattern of relationships was found to exist between the LOC and the LBDQ factors (see Table 23).

d. Tenure did not relate significantly with the follower's perceptions of the leader's behavior as measured by either the consideration or structure scales, but did relate significantly and negatively with LBDQ Factor I (mixed consideration and structure) at the group level (level two).

5. No significant relationships were found between the leader's description of his own behavior and the follower's description of that behavior.

6. A multiple regression analysis of the relationship between the leader and follower LOC factors and both the leader and follower's perceptions of the leader's behavior found that:

a. In relation to the follower's perceptions--

1. Luck and God external followers (those who believe that their outcomes are controlled by luck or God) tend to perceive their leaders as exhibiting less mixed consideration-structure behavior than do luck or God internal followers.

2. System external followers tend to perceive their leaders as less interpersonally involved than do system internal followers.

b. In relation to the way leaders are perceived by their followers--

1. Luck external leaders tend to be perceived by their followers as exhibiting less mixed consideration-structure behaviors and to be less interpersonally involved than are luck internal leaders.

2. System external leaders tend to be perceived by their followers as exhibiting more mixed consideration-structure behaviors and to be less interpersonally involved than are system internal leaders.

3. God external leaders tend to be perceived by their followers as exhibiting more mixed consideration-structure behaviors than are God internal leaders.

4. Competency external leaders tend to be perceived by their followers as exhibiting less mixed consideration-structure behaviors than do competency internal leaders.

c. In relation to the way the leaders perceive themselves--

1. Luck external leaders tend to perceive themselves as more structuring than do luck internal leaders.

2. Competency external leaders tend to perceive themselves as less structuring than do competency-internal leaders.

3. God external leaders tend to perceive themselves as less structuring than do God internal leaders.

d. In relation to the effect of the follower's LOC on the leader's self-perceptions--

1. Leaders whose followers are competency externals tend to perceive themselves as less structuring than do leaders whose followers are competency internals.

2. Leaders whose followers are God externals tend to describe themselves as exhibiting more mixed consideration-structuring behaviors and to be more structuring than do leaders whose followers are God internals.

3. Leaders whose followers are system externals tend to describe themselves as exhibiting more mixed consideration-structuring behaviors, and as more structuring than do leaders whose followers are system internals.

Discussion of the Findings

An examination of the results of the regression analyses revealed the expected complexity of the relationships between the leader's and the follower's LOC and the way in which the followers perceived their leader, and the way in which the leader perceived his own behavior. It appears, for example, that the way the follower's perceive their leader's behavior is differentially related to a combination of the leader's and the follower's LOC factors.

Table 28 indicates that the follower's perceptions of the leader's behavior as measured by LBDQ Factor I (mixed consideration-structure) is most closely related to the follower's LOC Factor II (luck external), and the leader's LOC Factor IV (competency external). To the extent that a follower believes that luck controls his life, he tends to describe his leader as low in LBDQ Factor I behaviors. However, to the extent that the leader believes that competency behavior will not achieve his desired outcomes, the followers tend to describe the leader as high in LBDQ Factor I behavior. Yet, when the leader describes his own behavior on the LBDQ Factor I dimensions, his own LOC appears to have no relationship. The major significant relationship with the leader's self-description appears

Table 28

Correlation Coefficients of Leader and Follower LOC With Leader and Follower Perceptions of Leader Behavior

[illegible]

Note: Decimal points omitted.

to be whether or not the followers are God externals, in which case, the leader tends to describe himself as higher on LBDQ Factor I behavior.

In explanation, it would appear that when the follower believes that luck controls his life, he would find the leader's mixed consideration-structure behavior to be irrelevant. For example, if the follower believes that his outcomes are controlled by luck, he would not be likely to be concerned about whether or not the leader looked out for his welfare. If the leader believes that being competent will not gain him his desired rewards, he might tend to fall back on rules and regulations and allow his follower's more participation in order to achieve his goals. The leader's LOC does not appear to be related to his self-reported behavior on the LBDQ Factor I dimension, but is significantly related to his follower's belief regarding how much God controls his outcomes. In this case, it would seem likely that the follower would take a passive and fatalistic outlook which would require more mixed consideration-structure behavior on the part of the leader if that leader is to attain his goals.

It must be remembered in this explanation, and in those to follow, that causality cannot be proven by the methodology utilized in this study. Further, it appears that due to the differential relationships between the LOC and LBDQ factors of the leader and followers, that further analysis will be required to determine how these factors interact to produce leader and follower perceptions of leader behavior.

The leader and follower perceptions of the leader's behavior as measured by LBDQ Factor II (interpersonal relations) appear to be dominated by the leader's LOC factors. Only the follower's LOC Factor II was found to have a significant relationship to the follower's perceptions of the leader's behaviors on this dimension (accounting for 6% of the

variance). Neither the leader's nor the follower's LOC were found to have a significant relationship with the leader's self-reported behavior as measured by LBDQ Factor II.

The leader's LOC Factors II and III were found to have a significant relationship with the way in which the follower's perceived the leader's behavior on this dimension. It appears logical, as indicated by the findings, that leaders who feel that luck controls their outcomes, and/or that their outcomes are controlled by the system, or powerful others, would see little to be gained by becoming interpersonally involved with their subordinates and thus influencing their behavior in an attempt to attain their outcomes.

Neither the follower's nor the leader's LOC was found to have a significant relationship with the way in which the followers described their leader's behavior on the dimensions of LBDQ Factor III (structure). However, both the leader's and the follower's LOC were significantly related to the way in which the leader described his own behavior on this dimension. Leaders who feel that their lives are controlled by God of luck and that competency will not attain their desired outcomes, tend to describe themselves as low in structuring behavior. This appears to be a logical finding, as those leaders who feel that the attainment of their outcomes could not be due to their own behavior, would make little attempt to influence and control the efforts of their subordinates.

Followers who feel that God controls their outcomes are likely to take a fatalistic, or passive approach towards gaining either their own or the organizational goals, and thus take little initiative in deciding how their tasks should be performed. In this case, the leader might quite logically increase his efforts to direct and guide his subordinate's

efforts. If however, the follower feels that competency will not gain his outcomes, the leader may feel that attempts to help the follower gain a measure of competency through structuring behaviors would be a waste of time.

As discussed previously, the Dansereaus and Dumas (1977) model seeks to provide a methodology for testing the assumptions regarding whether or not leader behavior is heterogeneous or homogeneous, that is, whether or not leaders behave differentially towards individual subordinates. Graen and Cashman (1975) maintained that the leader behaves differentially towards subordinates, and that the correct method of analysis must involve an examination of the "vertical-dyad linkage." Cummings (1975) argued that leader behavior is homogeneous because the leader must prevent the follower from acquiring preferential treatment in order to provide equality, and because of the time and energy costs to the leader associated with the diagnosis necessary to treat followers differentially. Cummings also maintained, that because of past reinforcement history, followers tend to view the leader as a generalized stimulus and do not behave differentially towards the leader. What Cummings apparently does not consider, is that both leaders and followers may interact with each other and with the environment to produce heterogeneous behavior without conscious effort. It is possible that leaders and followers often interact to produce heterogeneous behavior, and that neither is aware of the heterogeneity of their behavior until it is called to their attention by a third person.

The model for the examination of the relationship between leadership and other variables at three levels of analysis appears to have merit in that its use in this study discovered relationships that would not have been found using more traditional methods of analysis. However, the model

is relatively new, and to this author's knowledge, little empirical data have been reported to substantiate the model. It should be noted, however, that no criticism of this approach was recorded by the discussants at the 1976 Leadership Symposium as reported by Larson and Hunt (1977). The full implications of this method of analysis utilizing difference scores have yet to be examined.

The findings in this study seem to indicate that leader behavior is homogeneous within a group, and that such behavior is related to the leader's LOC and the overall LOC characteristics of his subordinates (that is LOC measured by averaging the LOC scores of the subordinates). It is still not possible to maintain that leader behavior is homogeneous within groups because of several possibly confounding factors. LOC may either have a moderating effect on the manner in which a leader behaves, or it may not affect his behavior, but only his perceptions of his own behavior. The instructions supplied the leaders on the LBDQ scales requested that they describe "the way they actually behaved." If the leaders followed these instructions, it is possible that they were reporting behaviors which were governed by factors other than their LOC in that they were reporting "discretionary" behavior. That is, behavior that was moderated by the rules of their particular organization, or behavior that was dictated by the members of the group, and not the behavior they would have exhibited if they were influenced solely by their LOC. It may be more fruitful to ask the leaders how they feel they should behave in order to remove the effects of the organizational factors on their self report. Even considering these possible confounding effects, the effect of LOC on the leader behavior, or his perceptions of his behavior, appears to be strong enough to dominate the confounding effects and produce a significant relationship

The wording of the items in the LBDQ scales may have also confounded the findings at the dyadic level of analysis. As pointed out by Dansereau and Dumas (1975), the LBDQ scales are designed to focus upon the leader's general behavior toward all subordinates. It would seem that the scale items would have to be reworded to focus upon the leader's behavior towards the specific subordinate in order to be able to use the data from the scales for a dyadic leader-follower analysis. A typical example of the rewording for the follower scale might be to change the question "He lets group members know what is expected from them," to "He lets me know what is expected of me."

A further confounding existed in the study in that the subjects were self-selected rather than chosen by random selection. It is possible that those subjects who agreed to participate in the study were members of a specific cluster, or clusters, within each church group. As pointed out by Dansereau and Dumas (1975), those "natural clusters" usually occur in organizations and are created by the tendency of individuals with similar characteristics to group together. These individuals may also use these clusters as reference points in responding to the researcher's questionnaires: If such clusters existed in the churches, and if these clusters had markedly different reference points, it could account for the inconsistencies in the relationships found in the present study and not be due to a faulty construct.

Phares (1976) reported that externals are much more variable in their beliefs, attitudes, and behaviors than internals, and along with Rotter (1966), speculates about the possibility of a curvilinear relationship between LOC and perceptions, attitudes, and behaviors. Phares further suggests that perceptual and behavioral distortions occur at both ends of

the LOC continuum; perhaps it is only in the middle range of the continuum that these distortions are minimized. It seems quite possible the curvilinear relationship exists in the sample population of this study. The LBDQ scales evidenced a lack of homogeneity of variance which may be due to the curvilinear relationship.

While this study found dimensionality existed in both the LOC and LBDQ scales, the usefulness of these factors has not been demonstrated by either this, or past studies of the relationship between LOC and leader behavior. Much more empirical evidence will be required to prove that these separate factors generate empirically separate predictions. The generalizability of this study's findings has still to be proven. Are the relationships found in this study peculiar to religious groups, or can they be generalized to all volunteer groups? It is possible that the nature of the church organizations and the low ratio of leaders to followers attenuates the effects of the minister's behavior on the perceptions of the followers.

The effect of tenure on the follower's perceptions of leader behavior was small, but it does provide for some speculation as to the accuracy of Rotter's (1975) theory that, as the situation becomes less ambiguous, the role of LOC as a generalized expectancy diminishes in favor of a situation-specific expectancy based upon repeated exposure to the environmental cues. This study's finding that tenure was negatively correlated with LBDQ Factor I ($r = -.20$, $p < .002$) may be due to the leader's natural tendency to reduce the frequency of his Factor I behavior as the follower's tenure increases, and allow his followers more autonomy in such areas as scheduling the work, maintaining standards, and requiring that rules and regulations be followed. If the relationship is not due to actual changes

in the leader's behavior as tenure increases, the small relationship would seem to indicate that the follower's perceptions of the leader's behavior change very slowly.

Recommendations

To more adequately examine the relationship between LOC and religious denominations, the sample population should be expanded so as to include possible regional differences.

While it is expensive in terms of time and money, the religious sample population should be chosen randomly with adequate follow-up to determine the differences between those chosen who respond, and those chosen who do not respond.

More attention should be given to the LOC construct and its stability. The LOC subfactors appear to vary from one sample population to another. Studies which base their findings on subfactors derived from another sample population should be viewed with suspicion until the assumption that such subfactors exist in the population under study are tested.

The God external LOC factor's relationship with work-related variables should be examined to determine its effects and generalizability.

Longitudinal studies should be designed to determine the role religion plays in the formation of personality traits such as LOC.

More effort should be placed on the analysis and modification of the LBDQ scales. Indications are that the factor structure of these scales varies between sample populations. If the LBDQ scales are to be used for dyadic-level analysis, they should be reworded to reflect that relationship.

While there is a growing recognition of the problems of measuring leader behavior utilizing leader and follower perceptions of that behavior,

more research should be directed at determining the relative importance of actual versus perceived leader behavior, and what cause distortions in these perceptions.

Further studies are required to examine the possible relationships between LOC and the group dynamic factors such as group norms, cohesiveness loyalty, perceived stress, etc.

Better statistical techniques for the analysis of leader-follower interactions at the dyadic-level should be developed and publicized. The present space restrictions in the journals are mitigating against the presentation of adequate descriptions of the statistical methods employed in published studies.

In view of the surprisingly large amounts of variance in perceived leader behavior explained by the LOC factors in this study, further research as recommended above appears to be justified.

APPENDIX A
INSTRUMENTS

ORIGINAL ROTTER SCALE USED IN PILOT STUDIES

Instructions

Each of the items in this questionnaire consists of a pair of alternative lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you think you should choose or the one you would like to be true. This is a measure of personal belief: obviously there are no right or wrong answers.

Please answer these items carefully but do not spend too much time in any one item. Be sure to find an answer for every choice. Indicate your answer by placing an "X" through the choice (a or b) that you select.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you are concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

1. A Children get into trouble because their parents punish them too much.
B The trouble with most children nowadays is that their parents are too easy with them.
2. A Many of the unhappy things in people's lives are partly due to bad luck.
B People's misfortunes result from the mistakes they make.
3. A One of the major reasons we have wars is because people don't take enough interest in politics.
B There will always be wars, no matter how hard people try to prevent them.
4. A In the long run people get the respect they deserve in this world.
B Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. A The idea that teachers are unfair to students is nonsense.
B Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. A Without the right breaks one cannot be an effective leader.
B Capable people who fail to become leaders have not taken advantage of their opportunities.
7. A No matter how hard you try some people just don't like you.
B People who can't get others to like them don't understand how to get along with others.
8. A Heredity plays a major role in determining one's personality.
B It is one's experiences in life which determine what they're like.
9. A I have often found that what is going to happen will happen.
B Trusting in fate has never turned out as well for me as making a decision to take a definite course of action.
10. A In the case of the well prepared student there is rarely if every such a thing as an unfair test.
B Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. A Becoming a success is a matter of hard work, luck has little or nothing to do with it.
B Getting a good job depends mainly on being in the right place at the right time.
12. A The average citizen can have an influence in government decisions.
B This world is run by the few people in power, and there is not much the little guy can do about it.
13. A When I make plans, I am almost certain that I can make them work.
B It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. A There are certain people who are just no good.
B There is some good in everybody.
15. A In my case getting what I want has little or nothing to do with luck.
B Many times we might just as well decide what to do by flipping a coin.
16. A Who gets to be boss often depends on who was lucky enough to be in the right place first.
B Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. A As far as world affairs are concerned, most of us are victims of forces we can neither understand, nor control.
B By taking an active part in political and social affairs the people can control world events.
18. A Most people don't realize the extent to which their lives are controlled by accidental happenings.
B There is really no such thing as luck.
19. A One should always be willing to admit mistakes.
B It is usually best to cover up one's mistakes.
20. A It is hard to know whether or not a person really likes you.
B How many friends you have depends upon how nice a person you are.

21. A In the long run the bad things that happen to us are balanced by the good ones.
B Most misfortunes are the result of the lack of ability, ignorance, laziness, or all three.
22. A With enough effort we can wipe out political corruption.
B It is difficult for people to have much control over the things politicians do in office.
23. A Sometimes I can't understand how teachers arrive at the grades they give.
B There is a direct connection between how hard I study and the grades I get.
24. A A good leader expects people to decide for themselves what they should do.
B A good leader makes it clear to everybody what their jobs are.
25. A Many times I feel that I have little influence over the things that happen to me.
B It is impossible for me to believe that chance or luck plays an important role in my life.
26. A People are lonely because they don't try to be friendly.
B There's not much use in trying too hard to please people, if they like you, they like you.
27. A There is too much emphasis on athletics in high school.
B Team sports are an excellent way to build character.
28. A What happens to me is my own doing.
B Sometimes I feel that I don't have enough control over the direction my life is taking.
29. A Most of the time I can't understand why politicians behave the way they do.
B In the long run the people are responsible for bad government on a national as well as on a local level.

MODIFIED I-E SCALE USED IN FIRST PILOT STUDY
(The God-external alternative replaces
Rotter's Original External
Alternatives)

1. A Children get into trouble because their parents punish them too much.
B The trouble with children nowadays is that their parents are too easy with them.
2. A Many of the unhappy things in people's lives are partly due to the will of God.
B People's misfortunes result from the mistakes they make.
3. A One of the major reasons why we have wars is because people don't take enough interest in politics.
B There will always be wars, no matter how hard people try to prevent them, because wars are part of God's plan for mankind.
4. A In the long run people get the respect they deserve in this world.
B God determines who shall and who shall not have fame and fortune.
5. A The idea that bosses treat people unfairly is nonsense.
B Most people don't realize how much God controls their success or failure.
6. A God determines who shall be leaders and who shall be followers.
B Capable people who fail to become leaders have not taken advantage of their opportunities.
7. A God determines how well you will get along with people.
B People who can't get others to like them don't understand how to get along with others.
8. A Heredity plays the major role in determining one's personality.
B It is one's experience in life which determine what they're like.
9. A I believe that God determines my fate.
B Trusting in God has never turned out as well for me as making a decision to take a definite course of action.
10. A For those who prepare themselves there is seldom such a thing as an unfair test of their abilities.
B As God determines our successes or failures, it is useless to plan ahead and prepare for opportunities.

11. A Becoming a success is a matter of hard work. God helps those who help themselves.
B Getting ahead depends upon the will of God and not upon our own skills and effort.
12. A The average citizen can have an influence in government decisions.
B God runs the world and there is not much that I can do to change the course of events.
13. A When I make plans, I am almost certain that I can make them work.
B It is not always wise to make plans for God will decide my future.
14. A There are certain people who are just no good.
B There is some good in everybody.
15. A God expects me to use my skills and abilities to get what I want.
B God determines whether or not I will get what I want.
16. A God will determine whether or not I will be a leader.
B Getting people to do the right thing depends upon my ability, God does not interfere.
17. A As far as world affairs are concerned, we are controlled by God's master plan which we can neither understand nor control.
B By taking an active part in political and social affairs the people can control world events.
18. A Most people don't realize the extent to which the will of God controls their lives.
B God leaves people free to control their own lives.
19. A One should always be willing to admit mistakes.
B It is usually best to cover up one's mistakes.
20. A It is hard to know whether or not a person really likes you.
B How many friends you have depends upon how nice a person you are.
21. A God causes misfortune to fall on the just and the unjust.
B Most misfortunes are the result of lack of ability, ignorance, laziness, or both.

22. A With enough effort we can wipe out political corruption.
B We can do little to control political corruption because man is naturally sinful.
23. A Sometimes I can't understand God's plan for my life.
B What happens to me depends on how hard I work for what I want.
24. A A good leader expects people to decide for themselves what they should do.
B A good leader makes it clear to everybody what their jobs are.
25. A Many times I feel that I have little influence over the things that happen to me because it is all part of God's unknowable plan.
B It is impossible for me to believe that God does not give me the right to control my own life.
26. A People are lonely because they don't try to be friendly.
B There's not much use in trying to please people, God will determine who will like you and who will not like you.
27. A There is too much emphasis on athletics in high school.
B Team sports are an excellent way to build character.
28. A What happens to me is my own doing.
B Sometimes I feel that I don't have enough control over my life, God controls it all.
29. A God decides whether we will have good or bad politicians.
B In the long run the people are responsible for bad government on a national as well as on the local level.

MODIFIED ROTTER SCALE
(Used in second pilot study and in the full-scale study)

Instructions

In this questionnaire, please circle the number which most closely indicates your feelings about the statements. For example, referring to question #1.

- a. If you strongly agree that "People's misfortunes result from the mistakes they make," circle 5.
- b. If you are uncertain about the truth of the statement that "People's misfortunes result from the mistakes they make," circle number 3.
- c. If you strongly disagree with the statement "People's misfortunes result from the mistakes they make," circle number 1.

Please circle only one number for each question.

The questions may seem repetitious, but please answer each question without any attempt to be consistent. You will provide a much more accurate picture of your beliefs if you do not look back at your previous answers when deciding how to answer the next question. There are no right or wrong answers to the questions.

1. People's misfortunes result from the mistakes they make.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

2. Most of the time I can't understand why politicians behave the way they do.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

3. God determines whether or not I will get what I want.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

4. One of the major reasons we have wars is because people don't take enough interest in politics.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

5. Sometimes I feel that I don't have enough control over the direction my life is taking.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

6. God will determine whether or not I will become a leader.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

7. In the long run people get the respect they deserve in this world.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

8. There's not much use in trying too hard to please people, if they like you, they like you.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

9. As far as world affairs are concerned, we are controlled by God whose plan we can neither understand nor control.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
10. Capable people who fail to become leaders have not taken advantage of their opportunities.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
11. Many times I feel that I have little influence over the things that happen to me.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
12. Most people don't realize the extent to which the will of God controls the lives.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
13. People who can't get others to like them don't understand how to get along with others.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
14. It is difficult for people to have much control over the things that politicians do in office.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
15. God decides how many friends you will have.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
16. Trusting in fate has never turned out as well for me as making a decision to take a definite course of action.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

17. In the long run the bad things that happen to us are balanced by the good ones.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

18. God causes misfortune to fall both on the just and the unjust.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

19. Becoming a success is a matter of hard work, luck has little or nothing to do with it.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

20. It is hard to know whether or not a person really likes you.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

21. We can do little to control political corruption because God has determined that man will be naturally sinful.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

22. The average citizen can have an influence in government decisions.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

23. Most people don't realize the extent to which their lives are controlled by accidental happenings.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

24. Many times I feel that I have little influence over the things that happen to me because it is all part of God's unknowable plan.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

25. God will determine whether or not I will become a leader.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
26. As far as world affairs are concerned, most of us are victims of forces we can neither understand, nor control.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
27. There's not much use in trying to please people, God will determine who will like you and who will not like you.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
28. In my case, getting what I want has little or nothing to do with luck.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
29. Who gets to be boss often depends on who was lucky enough to be in the right place first.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
30. Sometimes I feel that I don't have enough control over my life, God controls it all.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
31. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
32. Many times we might just as well decide what to do by flipping a coin.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

33. God determines whether we will have good or bad politicians.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

34. By taking an active part in political and social affairs, the people can control world events.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

35. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

36. When I make plans, I am almost certain that I can make them work.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

37. There really is no such thing as luck.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

38. This world is run by a few people in power and there is not much the little guy can do about it.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

39. It is not always wise to plan ahead because God will decide my future anyway.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

40. How many friends you have depends upon how nice a person you are.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

41. Getting a good job depends upon being in the right place at the right time.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
42. God runs the world and there is not much I can do about it.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
43. Most misfortunes are the result of the lack of ability, ignorance, laziness, or all three.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
44. I have often found that what is going to happen will happen.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
45. Getting ahead depends upon the will of God and not upon luck or skill.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
46. With enough effort we can wipe out political corruption.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
47. No matter how hard you try, some people just don't like you.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |
48. I believe that God determines my fate.
- | | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

49. It is impossible for me to believe that chance or luck plays an important role in my life.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

50. Without the right breaks, one cannot become an effective leader.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

51. God determines whether or not people will like you.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

52. People are lonely because they don't try to be friendly.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

53. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

54. God determines who will and who will not gain recognition and respect in this world.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

55. What happens to me is my own doing.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

56. There will always be wars no matter how hard people try to prevent them.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

57. There will always be wars no matter how hard people try to prevent them, because wars are part of God's plan for mankind.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

58. In the long run, the people are responsible for bad government on a national as well as on a local level.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

59. Many of the unhappy things in people's lives are partly due to bad luck.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

60. Many of the unhappy things in people's lives are partly due to the will of God.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| strongly disagree | disagree | uncertain | agree | strongly agree |
| 1 | 2 | 3 | 4 | 5 |

ROKEACH'S VALUE SURVEY SCALE

VALUE SURVEY SCALE

Instructions

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the left-hand side of the page.

Study the list carefully and pick out the one value which is the most important for you. Peel it off and paste it in Box 1 on the left.

Then pick out the value which is second most important for you. Peel it off and past it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18.

Work slowly and think carefully. If you change your mind, feel free to change your answers. The labels peel off easily and can be moved from place to place. The end result should truly show how you really feel.

| | | |
|----|--|---|
| 1 | | A COMFORTABLE LIFE a prosperous life |
| 2 | | AN EXCITING LIFE a stimulating, active life |
| 3 | | A SENSE OF ACCOMPLISHMENT lasting contribution |
| 4 | | A WORLD AT PEACE free of war and conflict |
| 5 | | A WORLD OF BEAUTY beauty of nature and the arts |
| 6 | | EQUALITY brotherhood, equal opportunity for all |
| 7 | | FAMILY SECURITY taking care of loved ones |
| 8 | | FREEDOM independence, free choice |
| 9 | | HAPPINESS contentedness |
| 10 | | INNER HARMONY freedom from inner conflict |
| 11 | | MATURE LOVE sexual and spiritual intimacy |
| 12 | | NATIONAL SECURITY protection from attack |
| 13 | | PLEASURE an enjoyable, leisurely life |
| 14 | | SALVATION saved, eternal life |
| 15 | | SELF-RESPECT self-esteem |
| 16 | | SOCIAL RECOGNITION respect, admiration |
| 17 | | TRUE FRIENDSHIP close companionship |
| 18 | | WISDOM a mature understanding of life |

When you have finished, go to the next page.

Below is another list of 18 values. Arrange them in order to importance, the same as before.

| | |
|----|---|
| 1 | AMBITIOUS hard-working, aspiring |
| 2 | BROADMINDED open-minded |
| 3 | CAPABLE competent, effective |
| 4 | CHEERFUL lighthearted, joyful |
| 5 | CLEAN neat, tidy |
| 6 | COURAGEOUS standing up for your beliefs |
| 7 | FORGIVING willing to pardon others |
| 8 | HELPFUL working for the welfare of others |
| 9 | HONEST sincere, truthful |
| 10 | IMAGINATIVE daring, creative |
| 11 | INDEPENDENT self-reliant, self-sufficient |
| 12 | INTELLECTUAL intelligent, reflective |
| 13 | LOGICAL consistent, rational |
| 14 | LOVING affectionate, tender |
| 15 | OBEDIENT dutiful, respectful |
| 16 | POLITE courteous, well-mannered |
| 17 | RESPONSIBLE dependable, reliable |
| 18 | SELF-CONTROLLED restrained, self-disciplined |

MODIFIED VERSION OF ROKEACH'S VALUE SURVEY SCALE
(Used in present study)

Directions

You will be asked to consider the values in pairs. When presented with each pair of values you must first decide which one of the pair is more important to you. Then you must decide just how much more important it is. Use the following scale to record your opinions:

- 3 = much more important than the other value
- 2 = moderately more important than the other value
- 1 = slightly more important than the other value
- 0 = neither one is more important than the other

EXAMPLE: Consider the two values WISDOM AND NATIONAL SECURITY

If WISDOM is moderately more important to you than NATIONAL SECURITY, mark the scale as follows:

| | | |
|---------------------|---------------|---------------------|
| WISDOM | | NATIONAL SECURITY |
| Much more important | 3 2 1 0 1 2 3 | Much more important |

If NATIONAL SECURITY is much more important to you than WISDOM, record your answer as follows

| | | |
|---------------------|---------------|---------------------|
| WISDOM | | NATIONAL SECURITY |
| Much more important | 3 2 1 0 1 2 3 | Much more important |

If WISDOM is neither more nor less important to you than NATIONAL SECURITY, mark the scale as follows:

| | | |
|---------------------|---------------|---------------------|
| WISDOM | | NATIONAL SECURITY |
| Much more important | 3 2 1 0 1 2 3 | Much more important |

Important Note: There are no "right" answers to this questionnaire. Everyone differs in what they value. Please record your own personal opinions and DO NOT PUT YOUR NAME ON ANY PART OF THIS QUESTIONNAIRE. All responses are private.

Please go as rapidly as you can--10 to 15 seconds per question is more than sufficient.

If two values appear redundant, first refer to their definitions above, and then circle the "most appropriate" number and go on to the next question.

| | | | | | | | | | |
|-----|--|---|---|---|---|---|---|---|---|
| 1. | PLEASURE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | EQUALITY MUCH MORE IMPORTANT |
| 2. | OBEDIENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | FORGIVING MUCH MORE IMPORTANT |
| 3. | EQUALITY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | SALVATION MUCH MORE IMPORTANT |
| 4. | OBEDIENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | CAPABLE MUCH MORE IMPORTANT |
| 5. | INNER HARMONY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | EQUALITY MUCH MORE IMPORTANT |
| 6. | CAPABLE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | HELPFUL MUCH MORE IMPORTANT |
| 7. | A SENSE OF ACCOMPLISHMENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | FAMILY SECURITY MUCH MORE IMPORTANT |
| 8. | HELPFUL MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | LOGICAL MUCH MORE IMPORTANT |
| 9. | A SENSE OF ACCOMPLISHMENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | PLEASURE MUCH MORE IMPORTANT |
| 10. | LOGICAL MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | OBEDIENT MUCH MORE IMPORTANT |
| 11. | MATURE LOVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | PLEASURE MUCH MORE IMPORTANT |
| 12. | OBEDIENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | BROADMINDED MUCH MORE IMPORTANT |
| 13. | A SENSE OF ACCOMPLISHMENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | AN EXCITING LIFE MUCH MORE IMPORTANT |
| 14. | IMAGINATIVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | CAPABLE MUCH MORE IMPORTANT |
| 15. | INNER HARMONY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | FAMILY SECURITY MUCH MORE IMPORTANT |
| 16. | CAPABLE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | BROADMINDED MUCH MORE IMPORTANT |
| 17. | AN EXCITING LIFE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | PLEASURE MUCH MORE IMPORTANT |
| 18. | INDEPENDENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | LOGICAL MUCH MORE IMPORTANT |

| | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|--|
| 19. | SALVATION MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | AN EXCITING LIFE MUCH MORE IMPORTANT |
| 20. | INDEPENDENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | HELPFUL MUCH MORE IMPORTANT |
| 21. | MATURE LOVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | INNER HARMONY MUCH MORE IMPORTANT |
| 22. | OBEDIENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | INDEPENDENT MUCH MORE IMPORTANT |
| 23. | SALVATION MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | A SENSE OF ACCOMPLISHMENT MUCH MORE IMPORTANT |
| 24. | HELPFUL MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | OBEDIENT MUCH MORE IMPORTANT |
| 25. | MATURE LOVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | A SENSE OF ACCOMPLISHMENT MUCH MORE IMPORTANT |
| 26. | BROADMINDED MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | LOGICAL MUCH MORE IMPORTANT |
| 27. | MATURE LOVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | FAMILY SECURITY MUCH MORE IMPORTANT |
| 28. | HELPFUL MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | BROADMINDED MUCH MORE IMPORTANT |
| 29. | FAMILY SECURITY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | EQUALITY MUCH MORE IMPORTANT |
| 30. | HELPFUL MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | FORGIVING MUCH MORE IMPORTANT |
| 31. | AN EXCITING LIFE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | EQUALITY MUCH MORE IMPORTANT |
| 32. | IMAGINATIVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | INDEPENDENT MUCH MORE IMPORTANT |
| 33. | EQUALITY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | A SENSE OF ACCOMPLISHMENT MUCH MORE IMPORTANT |
| 34. | HELPFUL MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | IMAGINATIVE MUCH MORE IMPORTANT |
| 35. | AN EXCITING LIFE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | FAMILY SECURITY MUCH MORE IMPORTANT |
| 36. | OBEDIENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | IMAGINATIVE MUCH MORE IMPORTANT |

| | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|--|
| 37. | SALVATION MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | FAMILY SECURITY MUCH MORE IMPORTANT |
| 38. | INDEPENDENT MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | BROADMINDED MUCH MORE IMPORTANT |
| 39. | EQUALITY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | MATURE LOVE MUCH MORE IMPORTANT |
| 40. | FORGIVING MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | INDEPENDENT MUCH MORE IMPORTANT |
| 41. | SALVATION MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | INNER HARMONY MUCH MORE IMPORTANT |
| 42. | IMAGINATIVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | BROADMINDED MUCH MORE IMPORTANT |
| 43. | MATURE LOVE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | SALVATION MUCH MORE IMPORTANT |
| 44. | FORGIVING MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | IMAGINATIVE MUCH MORE IMPORTANT |
| 45. | PLEASURE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | INNER HARMONY MUCH MORE IMPORTANT |
| 46. | FORGIVING MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | LOGICAL MUCH MORE IMPORTANT |
| 47. | INNER HARMONY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | A SENSE OF ACCOMPLISHMENT MUCH MORE IMPORTANT |
| 48. | CAPABLE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | INDEPENDENT MUCH MORE IMPORTANT |
| 49. | FAMILY SECURITY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | PLEASURE MUCH MORE IMPORTANT |
| 50. | LOGICAL MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | IMAGINATIVE MUCH MORE IMPORTANT |
| 51. | INNER HARMONY MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | AN EXCITING LIFE MUCH MORE IMPORTANT |
| 52. | CAPABLE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | LOGICAL MUCH MORE IMPORTANT |
| 53. | AN EXCITING LIFE MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | MATURE LOVE MUCH MORE IMPORTANT |
| 54. | FORGIVING MUCH MORE IMPORTANT | 3 | 2 | 1 | 0 | 1 | 2 | 3 | BROADMINDED MUCH MORE IMPORTANT |

This questionnaire asks you to consider 16 different values and to record your own personal preferences concerning which are the most important to you. The specific values to be rated are:

1. An exciting life = a stimulating and active life
2. A sense of accomplishment = a lasting contribution
3. Broadminded = open-minded
4. Capable = competent, effective
5. Equality = brotherhood, equal opportunity for all
6. Family security - taking care of loved ones
7. Forgiving = willing to pardon others
8. Helpful = working for the welfare of others
9. Imaginative = daring, creative
10. Inner harmony = freedom from inner conflict
11. Independent = self-reliant, self-sufficient
12. Logical = consistent, rational
13. Mature love = sexual and spiritual intimacy
14. Obedient = dutiful, respectful
15. Pleasure = an enjoyable, leisurely life
16. Salvation = saved, eternal life

MODIFIED VERSION OF STOGDILL'S LBDQ - FORM XII
(Used for followers. The even numbered items are structure items, the
odd numbered items are consideration items. The asterisked items
are reverse scored. The letter and numbers in the parentheses
identify the items in the same manner as referred
to in this study.)

LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE

Directions

- a. READ each item carefully
- b. THINK about how frequently the leader engages in the behavior described by the item.
- c. DECIDE whether he (A) always; (F) frequently; (O) occasionally; (S) seldom; or (N) never acts as described by the item.
- d. DRAW A CIRCLE around one of the life letters (A F O S N) following the item to show the answer you have selected.

A = Always
 F = Frequently
 O = Occasionally
 S = Seldom
 N = Never

- e. MARK your answers as shown in the examples below.

Example: He frequently acts as described A F O S N

Example: He never acts as described A F O S N

Example: He occasionally acts as described A F O S N

-
4. He lets group members know what is expected of them ... A F O S N(S1)
 7. He is friendly and approachable A F O S N(C1)
 14. He encourages the use of uniform procedures A F O S N(S2)
 17. He does little things to make it pleasant to be a
 member of the group A F O S N(C2)
 24. He tries out his ideas in the group A F O S N(S3)
 27. He puts suggestions made by the group into operation .. A F O S N(C3)
 34. He makes his attitudes clear to the group A F O S N(S4)
 37. He treats all group members as his equals A F O S N(C4)
 44. He decides what shall be done and how it shall be
 done A F O S N(S5)
 47. He gives advance notice of changes A F O S N(C5)
 54. He assigns group members to particular tasks A F O S N(S6)
 57. He keeps to himself A F O S N*(C6)
 64. He makes sure that his part in the group is under-
 stood by group members A F O S N(S7)

67. He looks out for the personal welfare of group A F 0 S N(C7)
74. He schedules the work to be done A F 0 S N(S8)
77. He is willing to make changes A F 0 S N(C8)
84. He maintains definite standards of performance A F 0 S N(S9)
87. He refuses to explain his actions A F 0 S N*(C9)
94. He asks that group members follow standard rules
and regulations A F 0 S N(S10)
97. He acts without consulting the group A F 0 S N*(C10)

MODIFIED VERSION OF STOGDILL'S LBDQ - FORM XII
(Used for leaders. The scoring is the same as that described
for the LBDQ - Form XII used for followers.)

The following questions ask you to describe how you carry out certain aspects of your position as a minister. Please circle whether you act in the described way:

(A) Always (F) Frequently (O) Occasionally (S) Seldom or (N) Never

4. I would let group members know what is expected of them A F O S N(S1)
7. I would be friendly and approachable A F O S N(C1)
14. I would encourage the use of uniform procedures A F O S N(S2)
17. I would do little things to make it pleasant to be a member of the group A F O S N(C2)
24. I would try out my ideas in the group A F O S N(S3)
27. I would put suggestions made by the group into operation A F O S N(C3)
34. I would make my attitudes clear to the group A F O S N(S4)
37. I would treat all group members as my equal A F O S N(C4)
44. I would decide what should be done and how it shall be done A F O S N(S5)
47. I would give advance notice of changes A F O S N(C5)
54. I would assign group members to particular tasks A F O S N(S6)
57. I would keep to myself A F O S N(C6)
64. I would make sure that my part in the group is understood by the group members A F O S N(S7)
67. I would look out for the personal welfare of group members A F O S N(C7)
74. I would schedule the work to be done A F O S N(S8)
77. I would be willing to make changes A F O S N(C8)
84. I would maintain definite standards of performance ... A F O S N(S9)
87. I would refuse to explain my actions A F O S N(C9)
94. I would ask that group members follow standard rules and regulations A F O S N(S10)
97. I would act without consulting the group A F O S N(C10)

BIOGRAPHICAL DATA

Please provide the information requested below:

1. AGE: (Please indicate your age to the nearest birthday, or if you prefer, circle the appropriate numbers below:

| | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 20-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 65-over |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

2. SEX: Male _____ Female _____

3. During the last year I attended church and/or Sunday school (count each as a separate attendance) an average of: (circle one)

twice a week or more
1

once a week
2

twice a month
3

once a month
4

once every two months
5

once every three months
6

less than once every three months
7

4. Religious Denomination: (circle one)

Baptist Congregational Episcopalian Lutheran Methodist
Presbyterian

5. I have been associated with this present minister for _____ months

(Please indicate the number of months you have been under this particular minister.)

APPENDIX B
CORRESPONDENCE AND NOTICES

First Page of the Questionnaire.

The purpose of this survey is to see how the members of the various Protestant denominations view the world about them.

This questionnaire has been discussed with your priest, pastor, or minister who has given me permission to ask for your assistance. But you are under no obligation to participate in the survey it is purely voluntary. The questionnaires are strictly anonymous. Do not put your name, or the name of your church on the questionnaire.

Below is a sample announcement provided the minister from which he could notify his congregation of the survey.

Mr. Leslie Gaskins, a member of the faculty at the University, is conducting a survey of the major Protestant denominations to determine if there are differences in the degree of importance their members attach to certain values and how they perceive the leadership style of minister or pastor. If such differences are found, they may increase our understanding of the role our religion plays in our lives.

Mr. Gaskins guarantees the anonymity of both the individual and the church. If you would like to participate in this survey, please pick up a questionnaire at the back of the church after the service and return it to the church office on, or before 13 August.

Mr. Gaskins will be pleased to share his findings with us if you so desire.

Copy of letter mailed to Ministers who were not in the denominations surveyed.

University of Florida
J. Hillis Miller Health Center
College of Dentistry
Department of Community Dentistry
Box J-404
Gainesville, Florida 32610

Dear Reverend:

I am a member of the faculty at the University of Florida who would like your assistance in completing a leadership survey.

We are now in the process of surveying twelve other churches in Gainesville to determine if their members differ in their views of certain aspects of their lives. In addition, we are interested in how the minister's views on these same aspects influence his perceptions of his job as a minister.

We have had an excellent response from the twelve participating churches, however, we only have data on twelve ministers and would like to collect a larger sample to add to the accuracy of our findings.

Your participation would be greatly appreciated in, what we feel, is a very worthwhile research effort. If you wish to help, please fill out the attached questionnaires and return them to us in the envelope provided by 28 August, 1978.

To guarantee your privacy, please do not write your name, or place any other identifying marks on the questionnaires. If you are interested in the results of the survey please return the enclosed postcard separately including your name and address, we will be happy to share our findings with you.

Sincerely,

Leslie E. Gaskins

Letter used to gain access to one Lutheran church.

Pastor Robert C. Besalski
First Lutheran Church of Gainesville
1801 N. W. 5th Avenue
Gainesville, Florida 32601

Dear Pastor Besalski:

The following is the background on the religion research I contacted you about on the 19th of July. First, a little about myself. I am a former Air Force Officer who retired after 32 years service and am now teaching management here at the University of Florida while working on my dissertation for a Ph.D. in the College of Business Administration.

The title of my dissertation is: "Locus of Control: Its Relationship to Religious Denominations and Leader-Follower Perceptions of Behavior." In 1966, a researcher, Dr. Rotter, found evidence that individuals differ in their beliefs as to the degree that their rewards are contingent on their own behavior versus the degree to which they feel that their rewards are controlled by fate, luck, chance, or powerful others. In 1971, Shraugher and Silverman commented in the Journal for the Scientific Study of Religion, "That many religious denominations seem to have implications for the development of attitudes about one's potential for control over what happens to him. Some imply that one's fate rests with sources outside himself." These same researchers found differences between the Catholic, Protestant, and Jewish faiths, but to my knowledge, no one has attempted to determine if there are differences between the various Protestant denominations.

An examination of the scale used by Shraugher and Silverman (Attachment 1) causes me to doubt that the scale is adequate to examine the true relationship between an individual's religious beliefs and his beliefs about the degree of control he has over what happens to him. The scale only addresses the possibility that his life is controlled by luck, fate, chance, or powerful others. (In this scale, powerful others are depicted as politicians, world leaders, or teachers.) To an individual who feels that his life is controlled by God, such questions would appear irrelevant. With this in mind, I have developed a new scale which retains the elements in the original scale and have added the concept of God as still another possible source of control (Attachment 2).

In 1969, Dr. Rokeach conducted a nation-wide survey and found the members of the various religious denominations also varied as to the degree of importance their members placed on certain values such as salvation and a sense of accomplishment (Attachment 3). It is proposed to attempt to replicate this study to determine if these findings are still relevant today.

Although not specifically related to religion, other researchers have found that the individual's beliefs as to the degree of control he has over his life may affect how he perceives his leaders' behavior, and also how the leaders themselves behave in terms of leadership style. This study also proposes to investigate this possibility by asking church members to describe the behavior of their minister (Attachment 4).

A biographical questionnaire will also be included (Attachment 5) to gather data on those factors which may affect all the relationships described above.

To implement this research, two churches from each of the six major Protestant denominations were selected from which to gather the data (Baptist, Methodist, Lutheran, Presbyterian, Episcopal, and Congregational). The ten churches contacted thus far have agreed to participate and 156 questionnaires have been returned from six churches.

Two approaches have been used to gather the data. Several churches have permitted me to meet with their adult Sunday School classes whose members have completed the questionnaires during the class period. In those cases where the classes were not in session during the summer months, the minister has placed an announcement in the church bulletin and/or made an announcement during the service that a survey was being conducted and that those who wished to participate might pick up the questionnaire on leaving the church and return it on the following Sunday. In this case, a letter was attached to each questionnaire emphasizing that participation was purely voluntary and assuring the anonymity of both the individual and the church (Attachment 6).

I would greatly appreciate the approval of your governing body to conduct this survey in your church. As stated previously, I will guarantee the anonymity of both the individuals and the church. All references in the study will be in term of Baptist, Lutheran, etc. churches in the Southeast United States.

Because of the anonymity guarantee, I cannot divulge the names of the churches now participating in the survey. However, should you wish to confirm my credentials, I refer you to my dissertation advisor, Dr. H. Joseph Reitz, 392-0133, my own minister, Reverend O. Dean Martin, 375-6615, and Dr. Samuel Hill of the University's Department of Religion, 704-963-5663 (now on vacation).

Sincerely,

Leslie E. Gaskins
University of Florida
College of Dentistry
Department of Community Dentistry
Box J-404
J. Hillis Miller Health Center
Gainesville, Florida 32610

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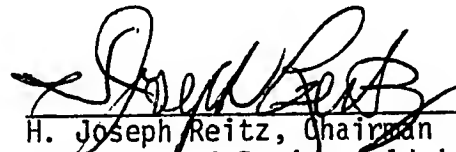
BIOGRAPHICAL SKETCH

Leslie Elwood Gaskins was born February 5, 1922, in Bentonville, Ohio. He graduated from Cleveland Heights High School in Cleveland Heights, Ohio, in 1939, and received his Bachelor of Science degree (high honors) with a major in military science from the University of Maryland in 1965.

In 1942, Mr. Gaskins joined the United States Army Air Corps (later to become the United States Air Force) and remained on active duty until 1974. In the interim, he attended the United States Naval War College and attained the rank of Colonel in the United States Air Force. His final position on active duty was as commander of the two United States Air Force bases in the Panama Canal Zone.

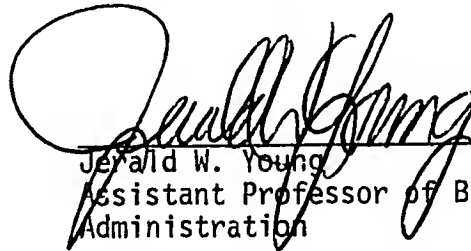
In 1974, Mr. Gaskins retired from active duty and entered the management doctoral program in the College of Business Administration at the University of Florida. His special area of interest is organizational behavior.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



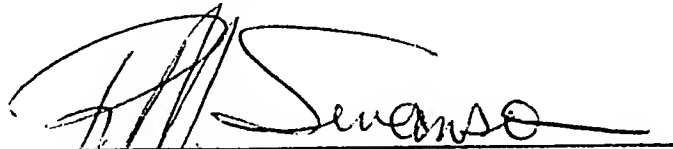
H. Joseph Reitz, Chairman
Professor of Business Administration

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Jerald W. Young
Assistant Professor of Business
Administration

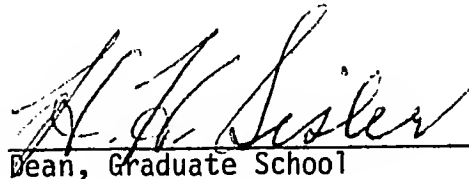
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Richard M. Swanson
Associate Professor of Criminal
Justice

This dissertation was submitted to the Graduate Faculty of the Department of Management in the College of Business Administration and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December, 1978



Dean, Graduate School

